Loong

Designed and folded by Li Changqi



龙

头部 实拍教程

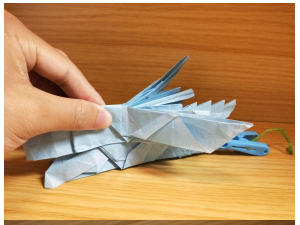
作者：李昌祺

This is a photo tutorial made by Li Changqi. It is completely free, and you can share it with your friends or other websites. But it cannot be used for any commercial purpose (such as sale). If you want to remake the tutorial (such as making a video or making other tutorials) I hope you can get in touch with me in advance (not necessary).

In the end, this is actually not a perfect tutorial. Loong 2.0 is not a perfect design. There are even many shortcomings. I am very happy that some people still like my work. So I will try my best to perfect it in the future, and it will also be posted on some of my personal accounts for free.

Twitter: @Li_Changqi
Email: 1993817822@qq.com
QQ: 1993817822

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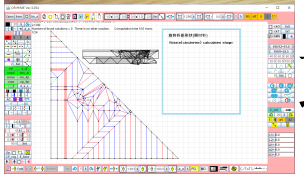
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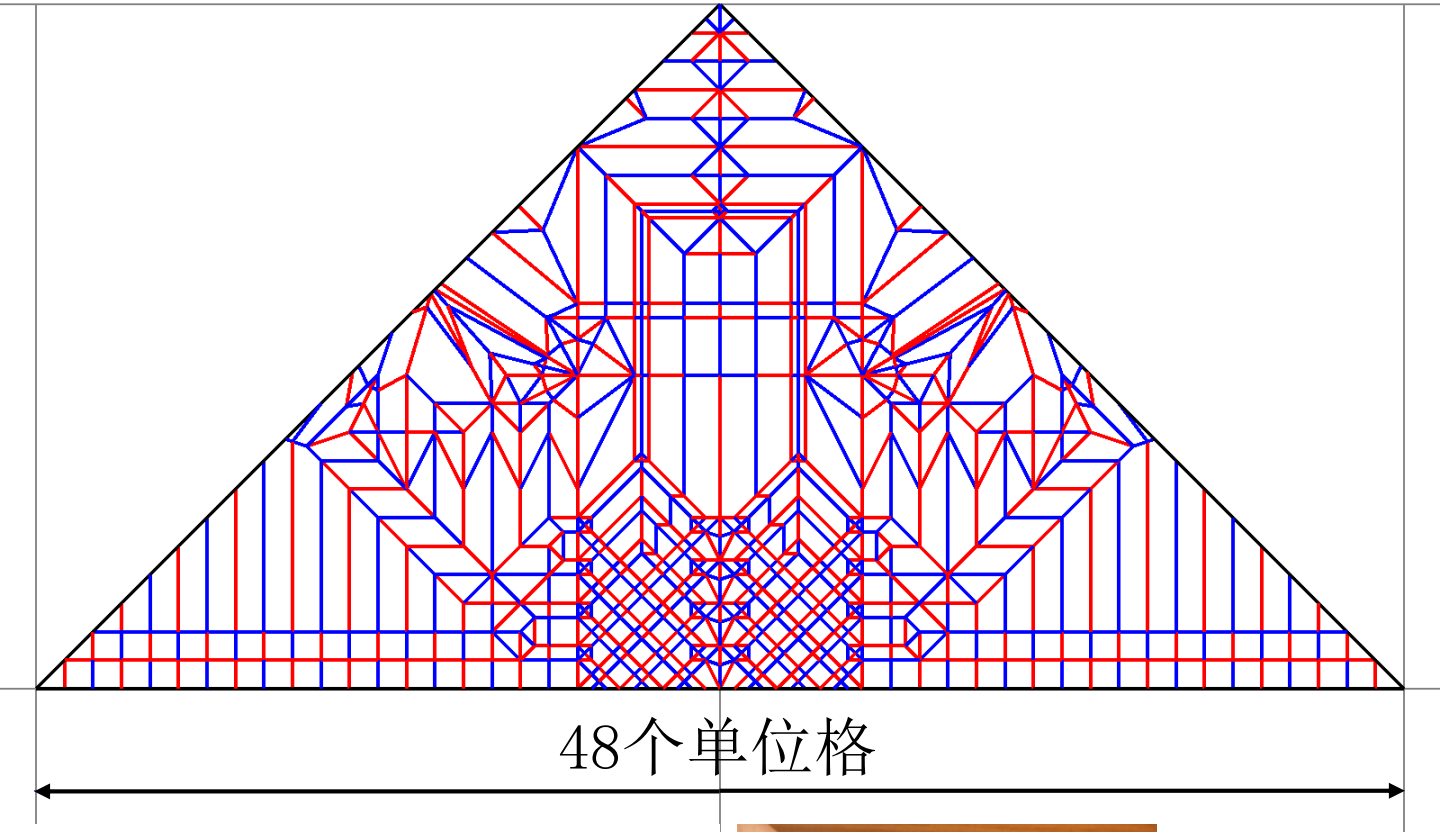


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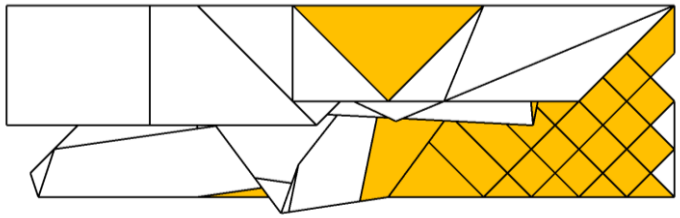
取线——————————————————————— 249

聚合

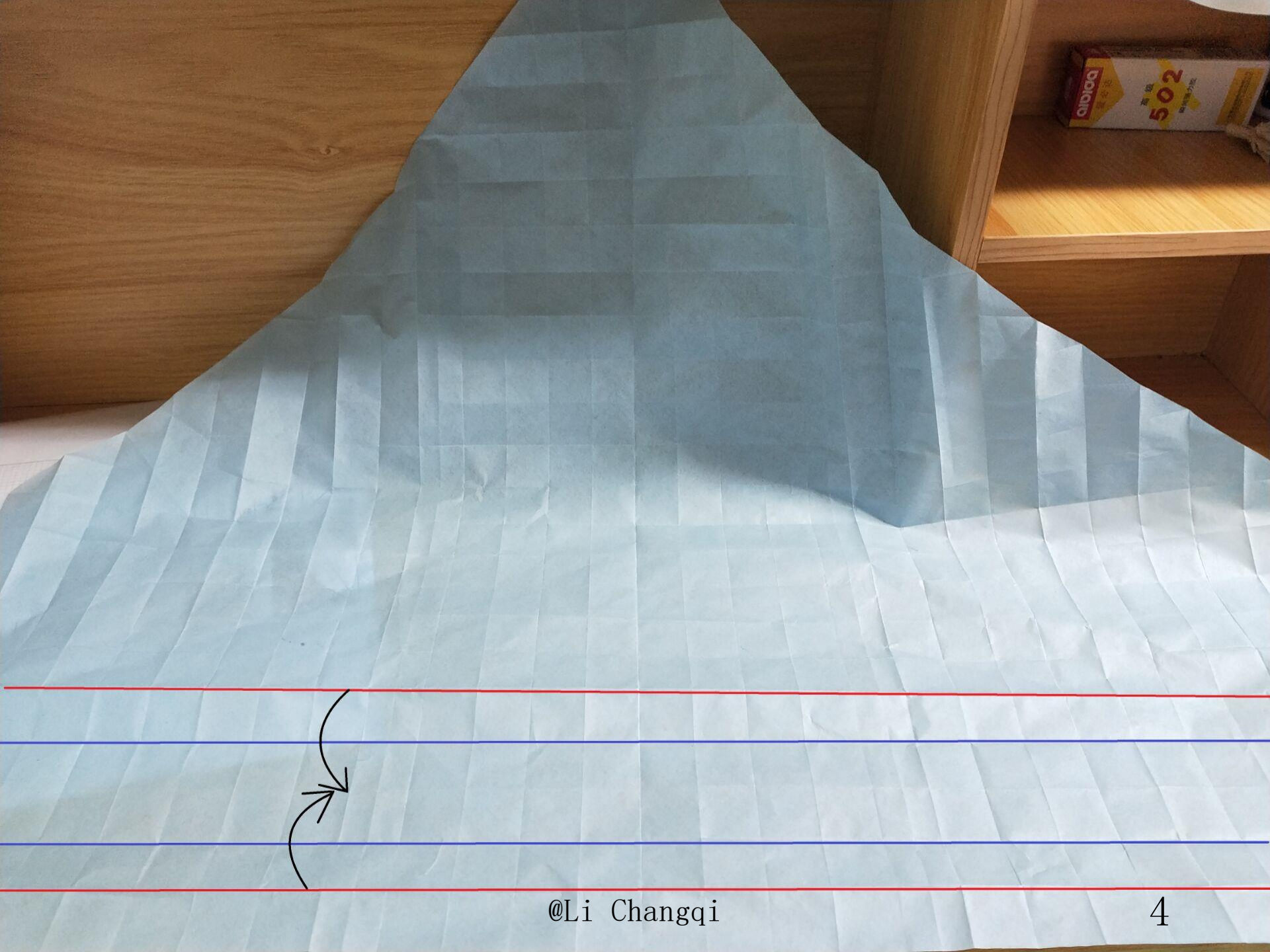


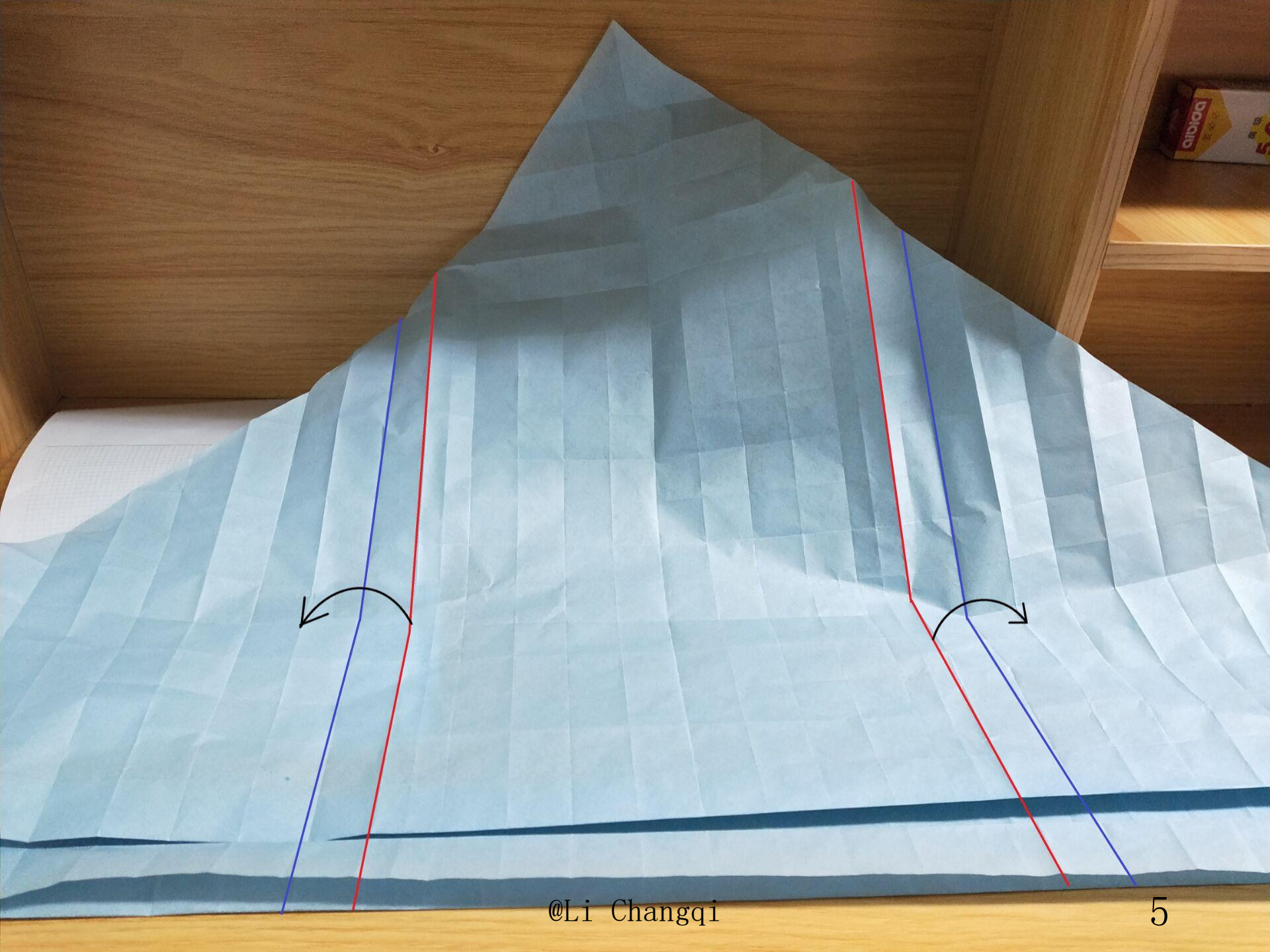
这里取了整个cp的一角（1/8）

实拍中的取线为粗略取线，标准取线比较繁琐，且没有太大必要。有兴趣了解的可以看一看文档尾的演示



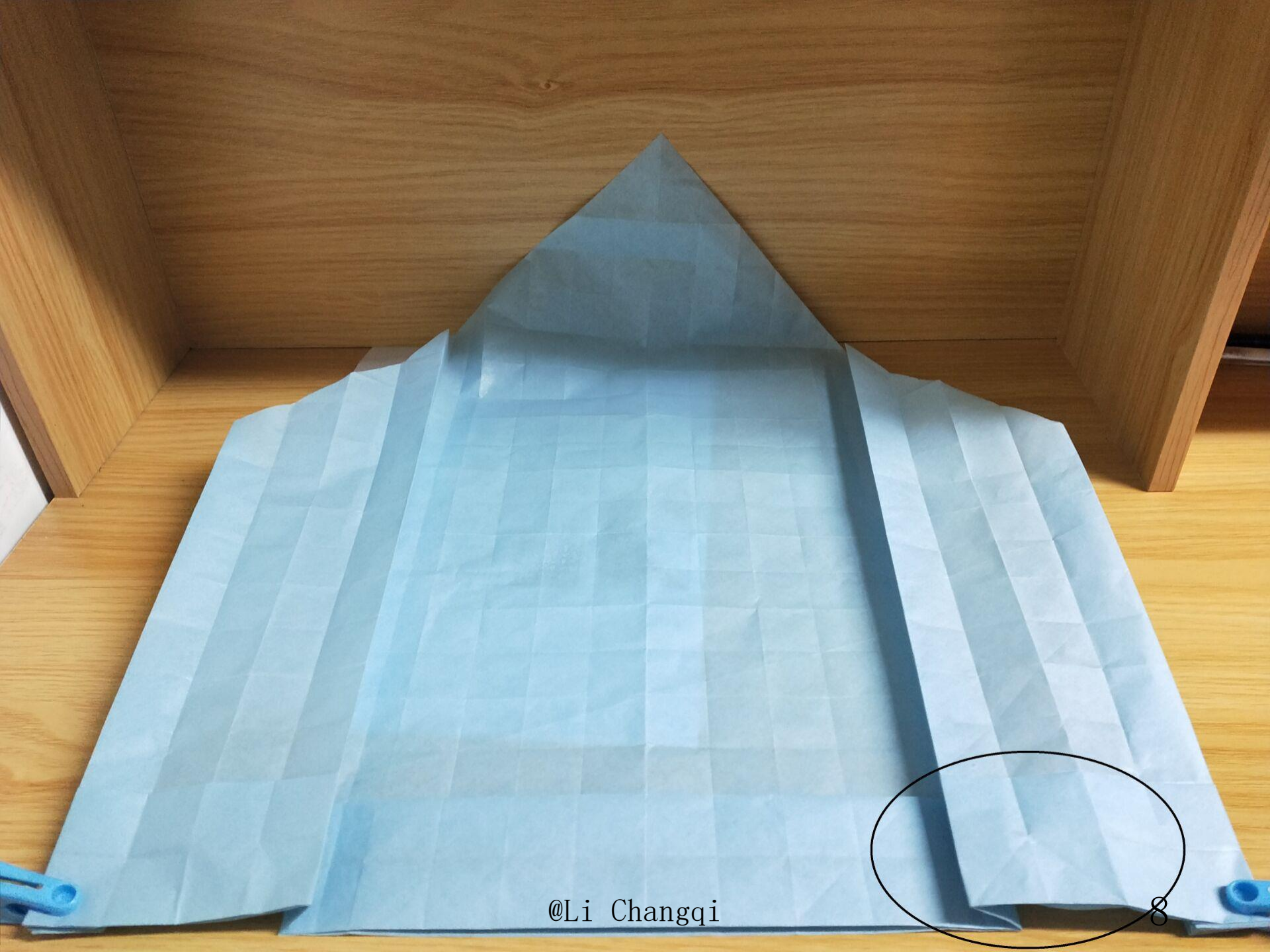



502

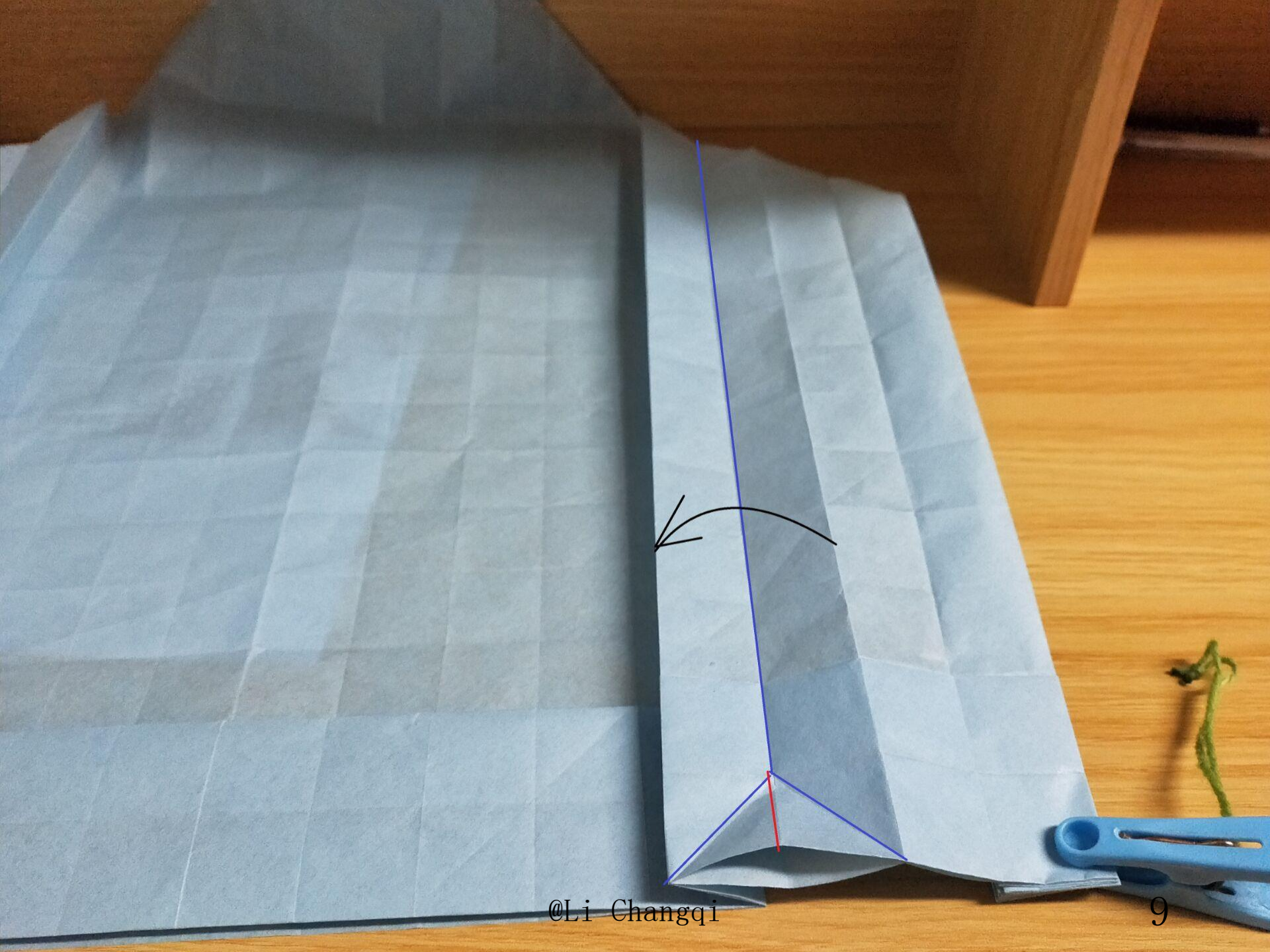


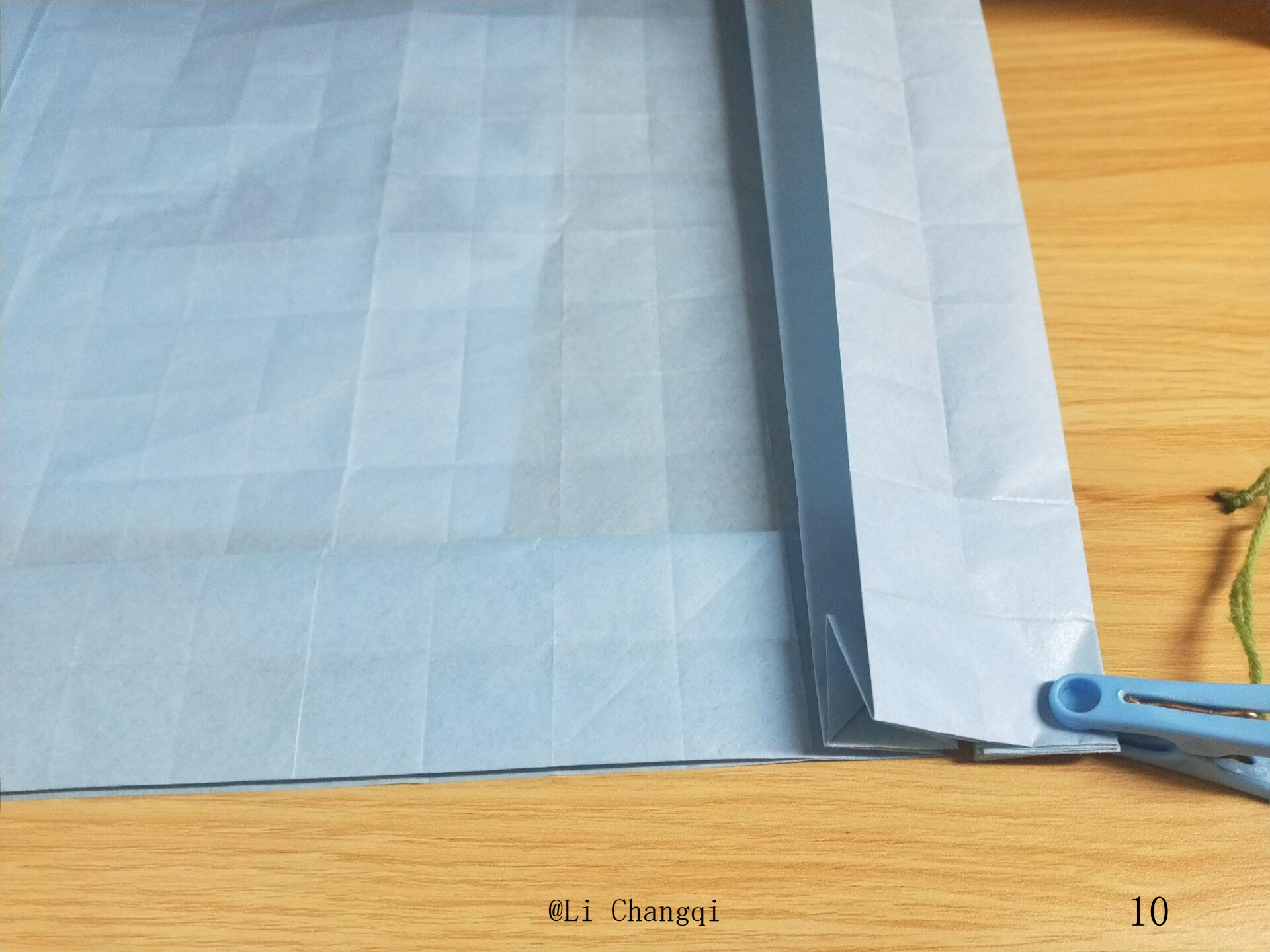




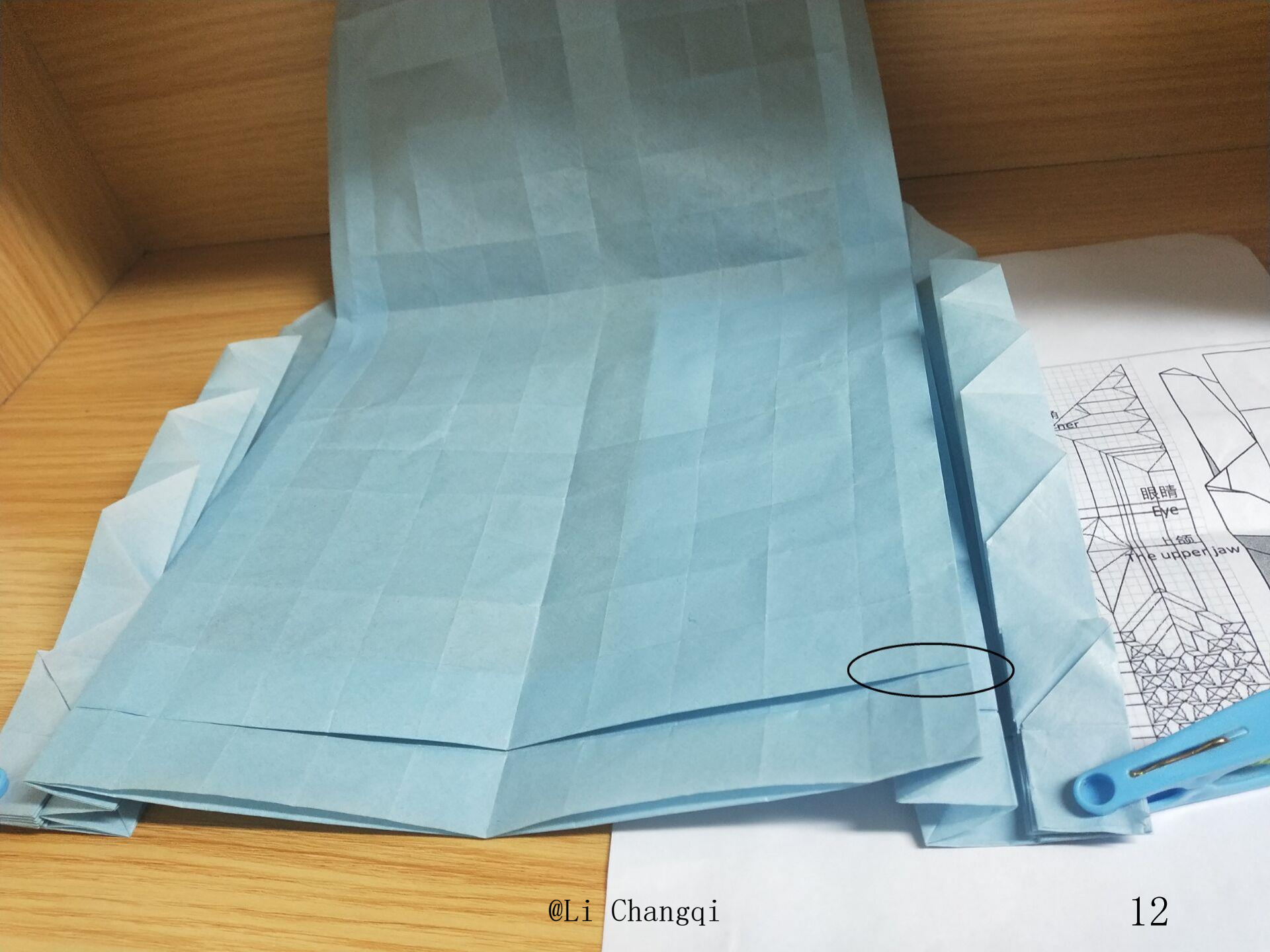


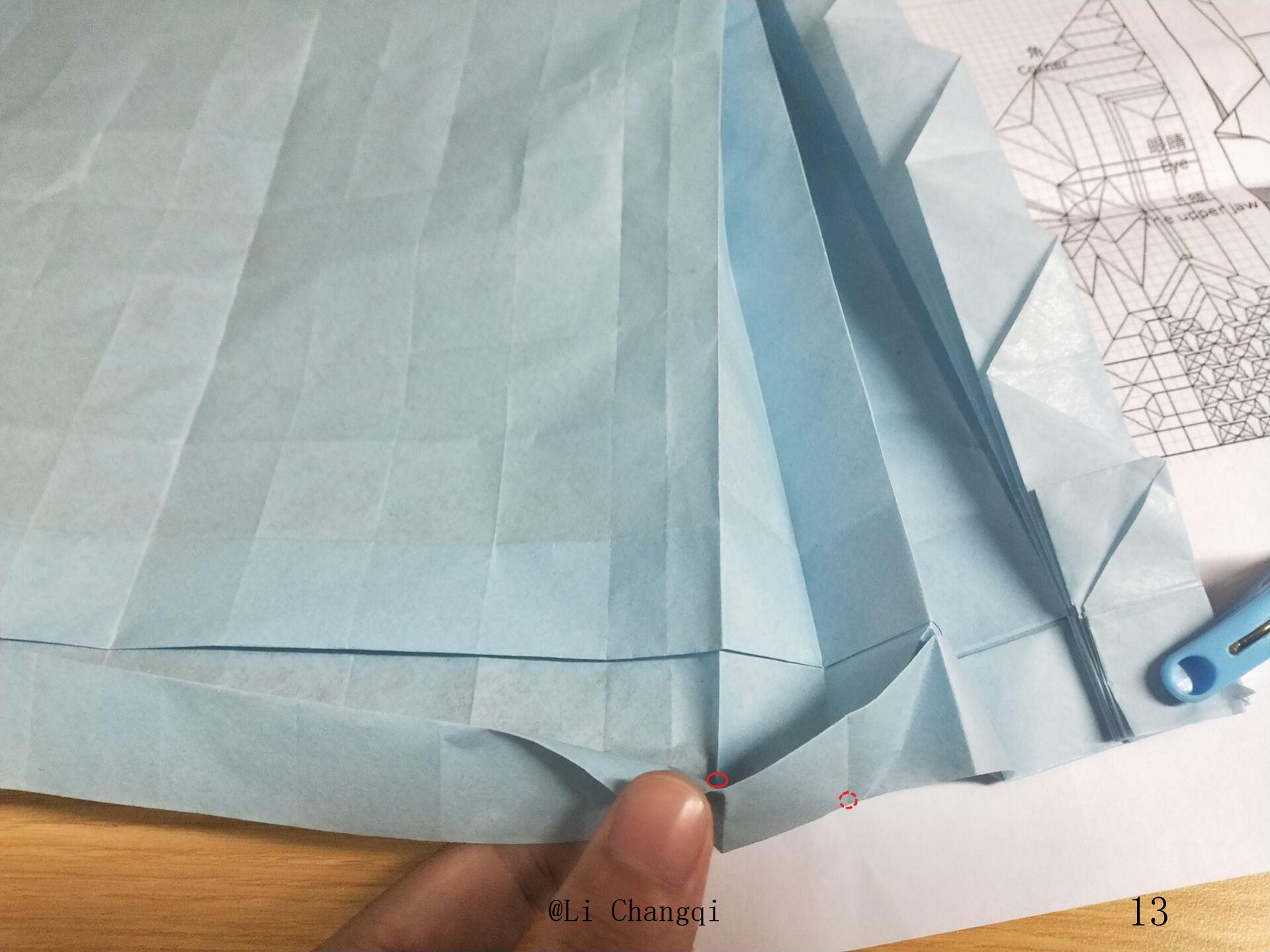
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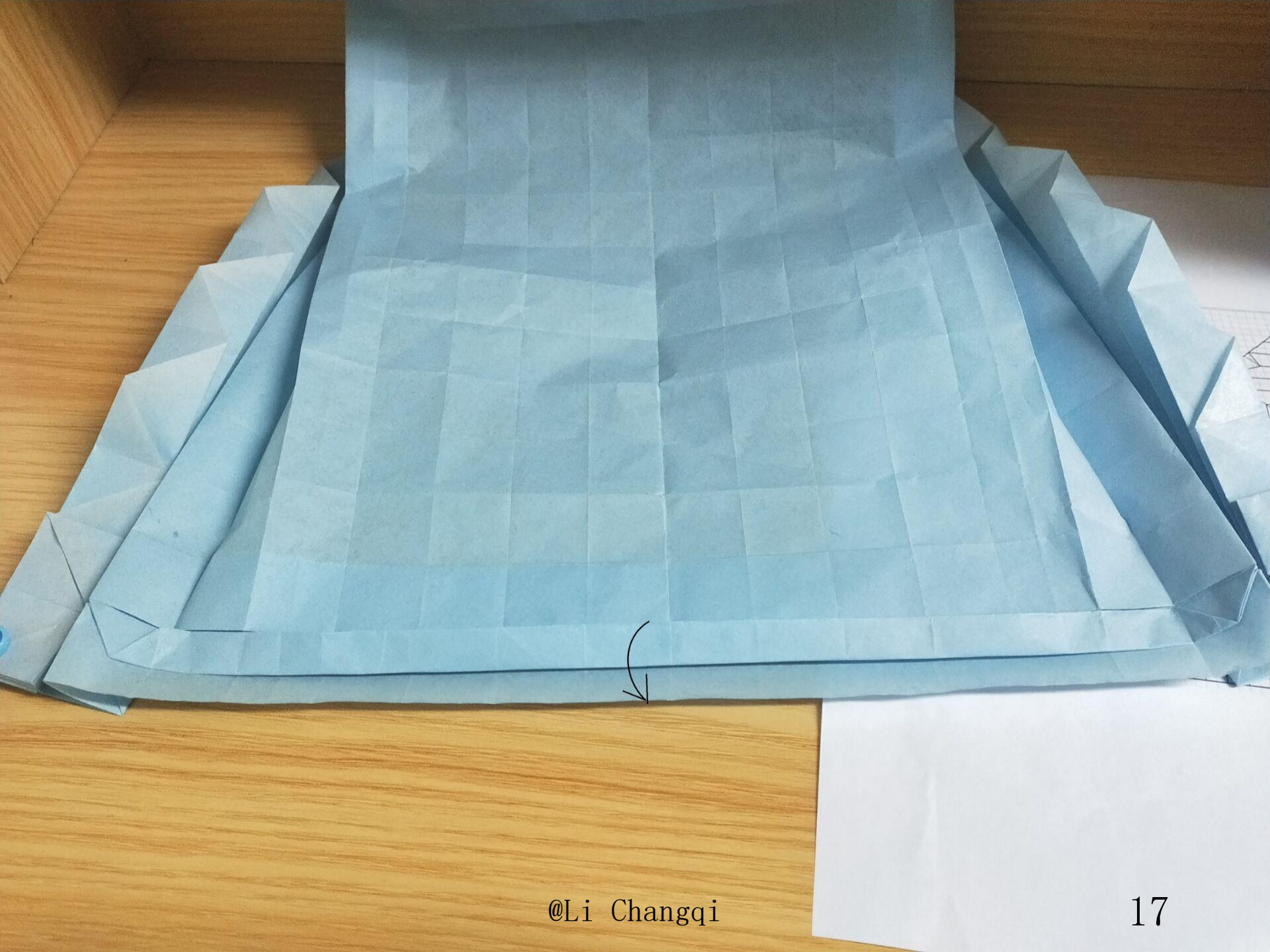

眼睛
Eye
The upper jaw


角
corner
眼睛
eye
上顎
the upper jaw

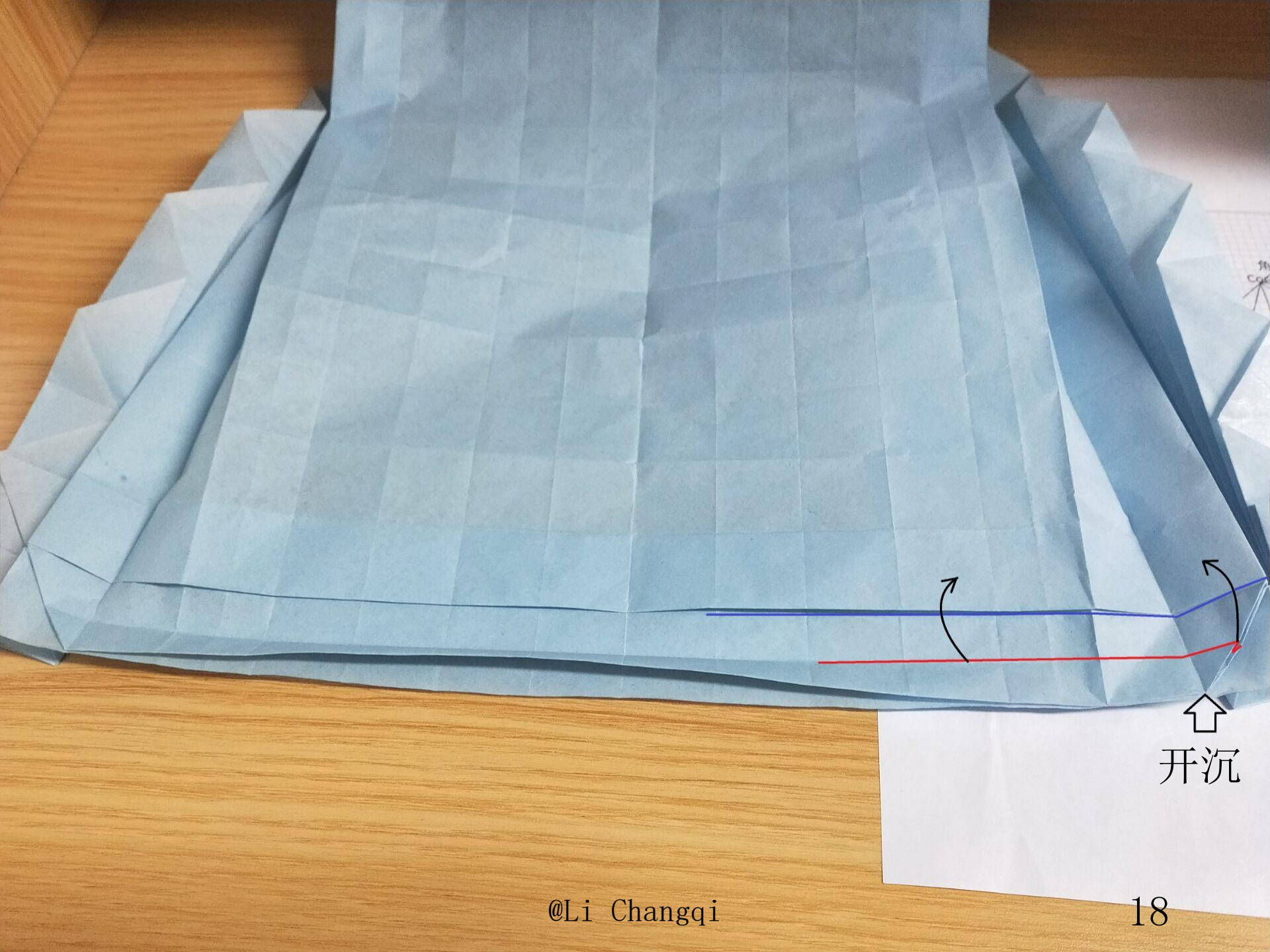


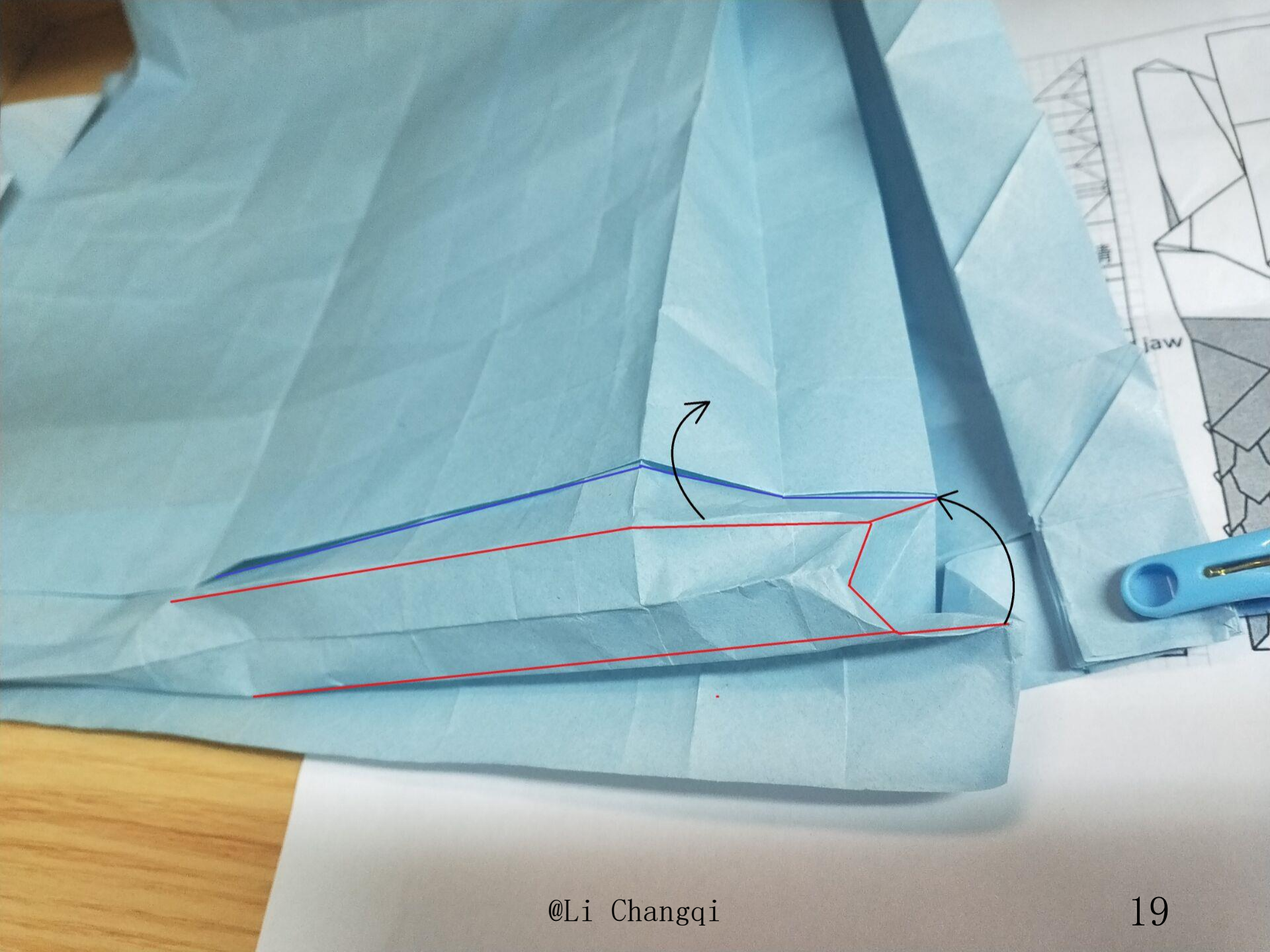

左侧重复


角
Corner
眼睛
Eye

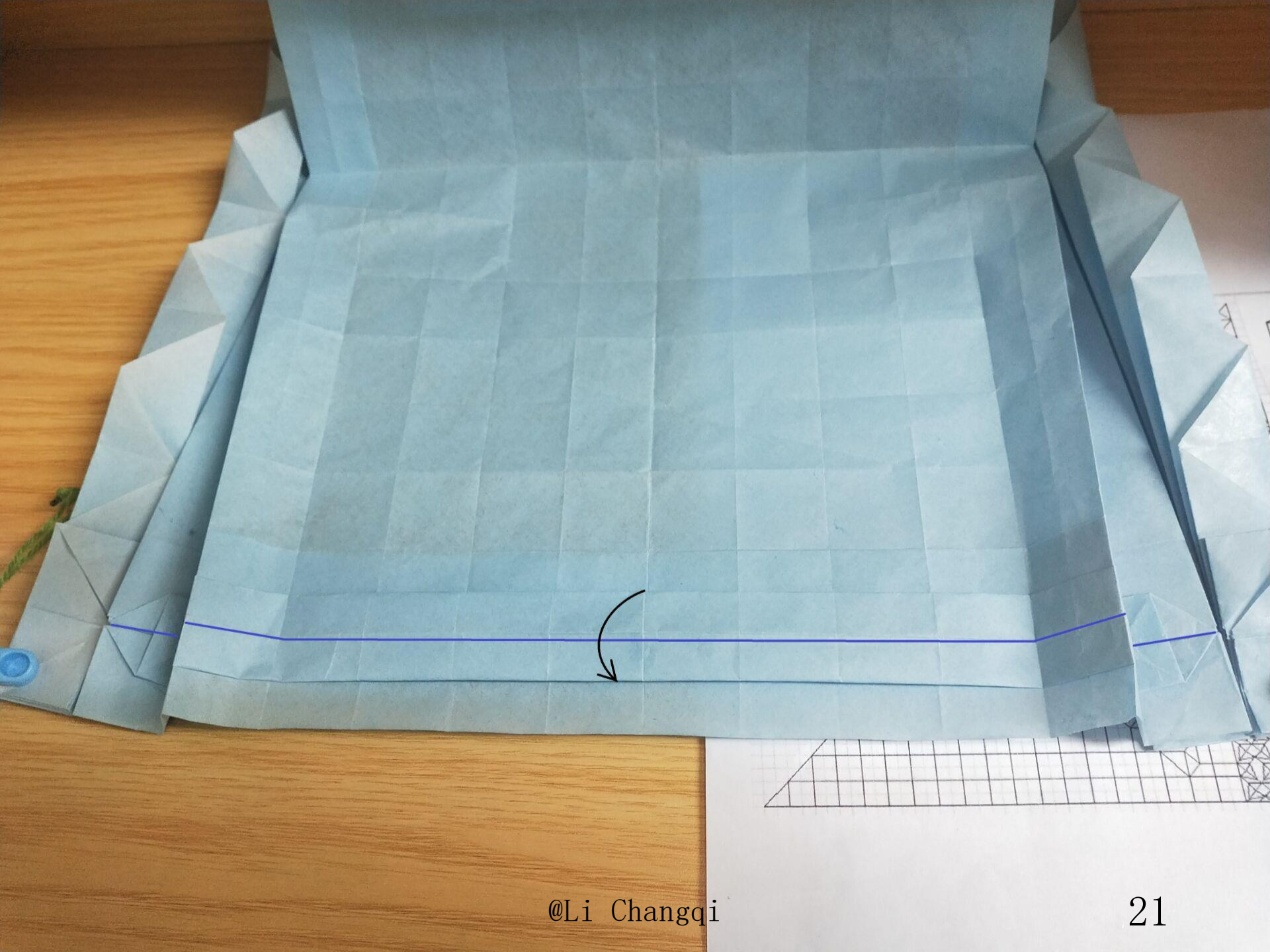


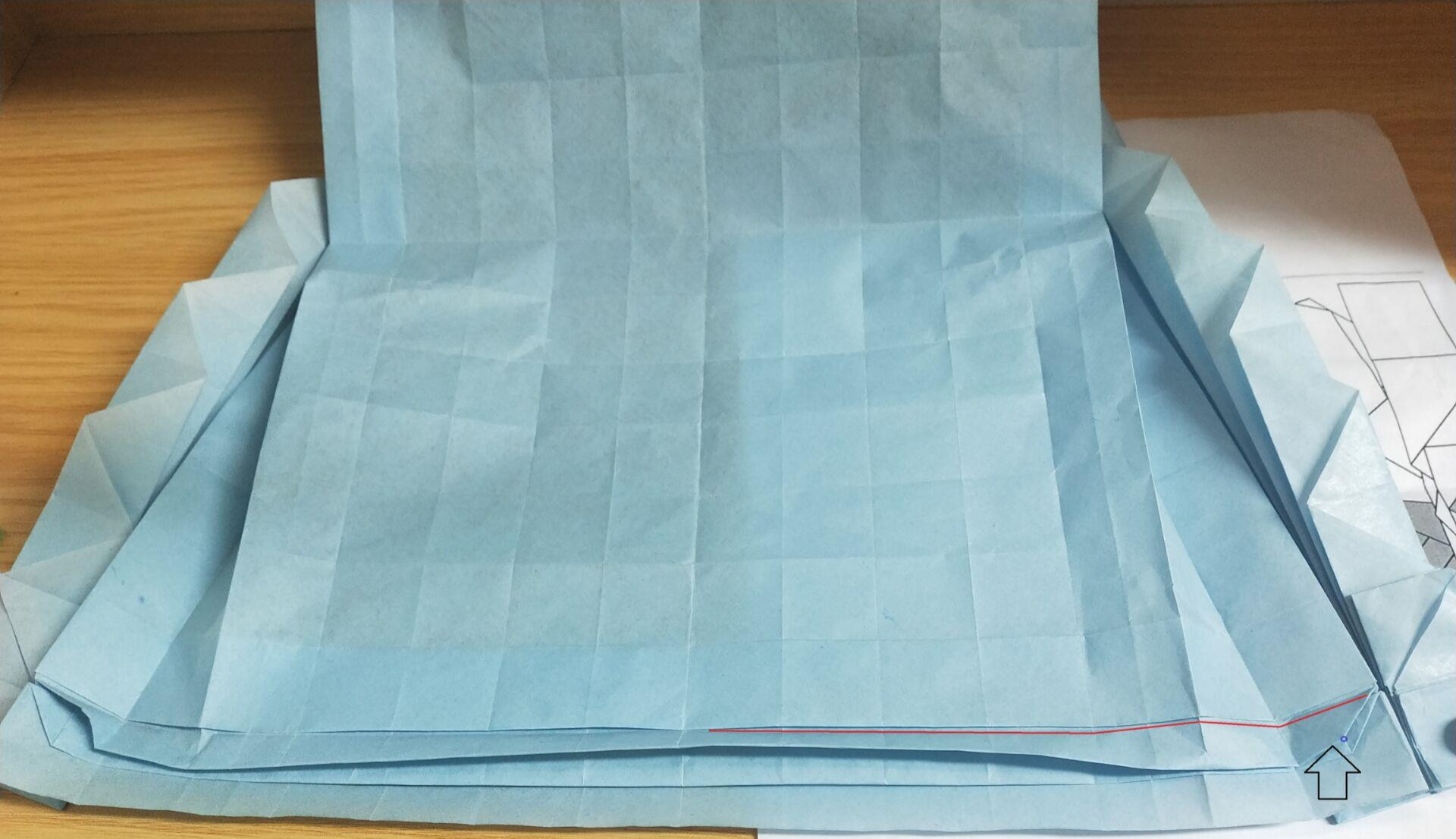
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开沉

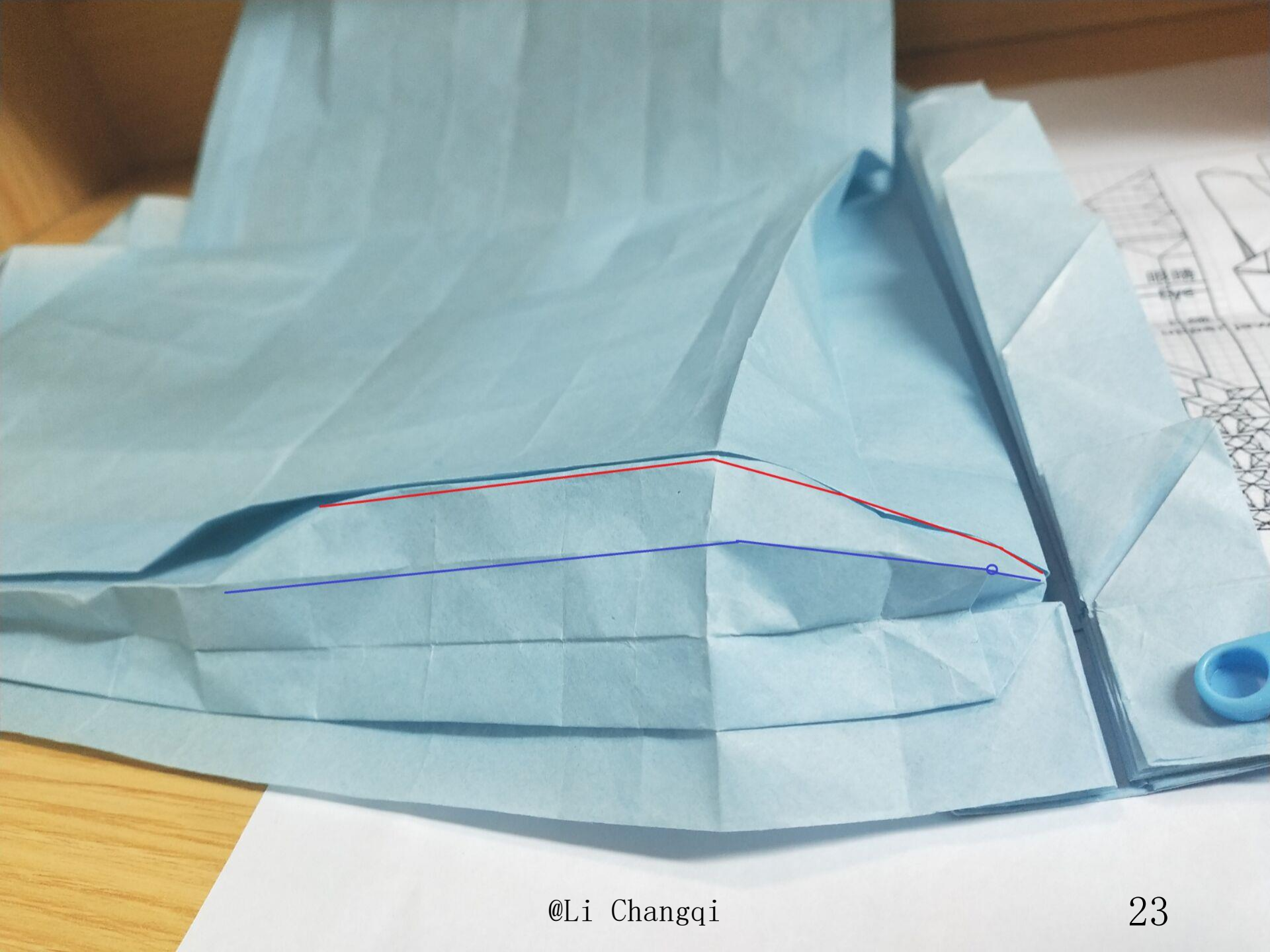

Jaw





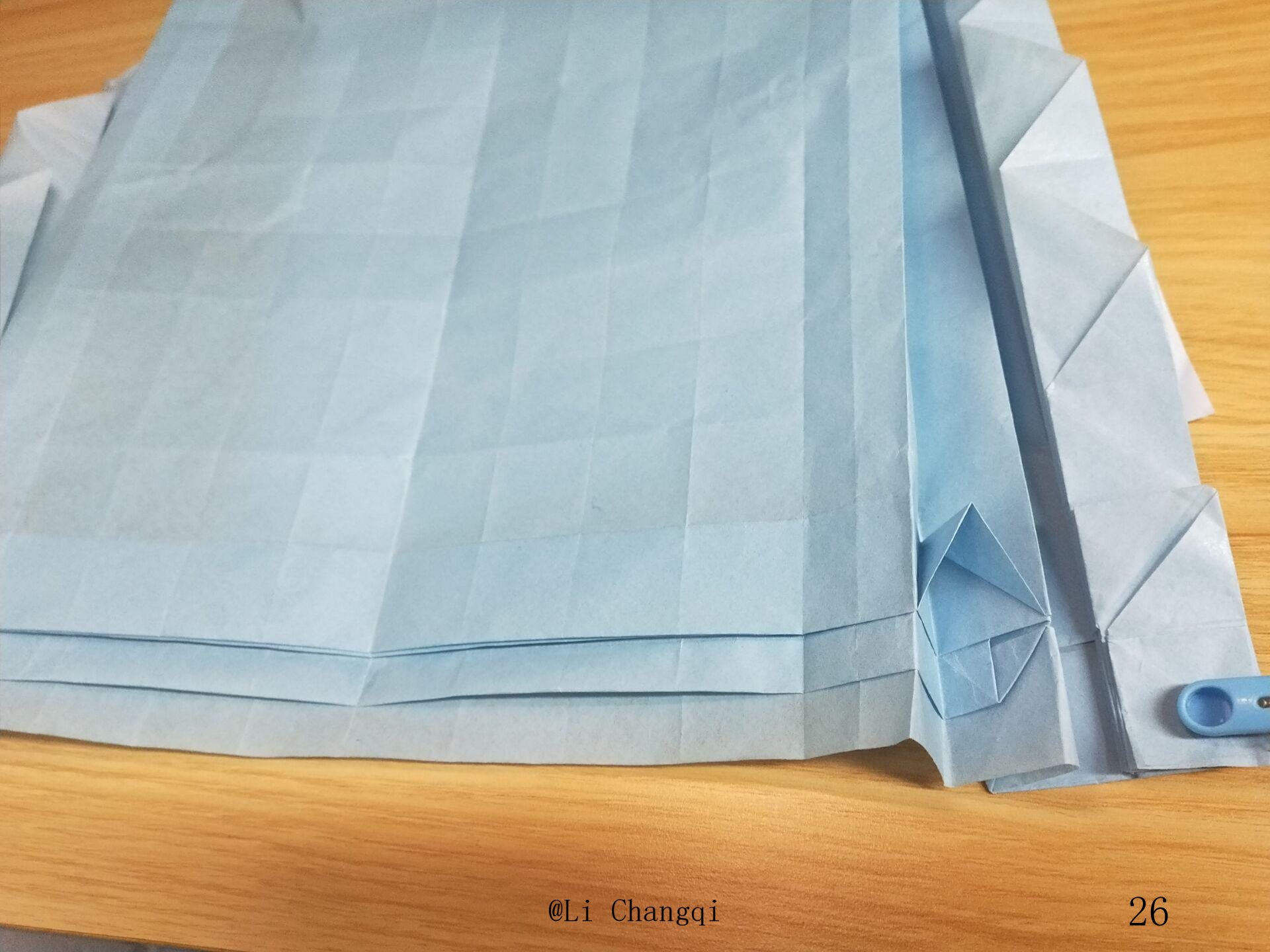


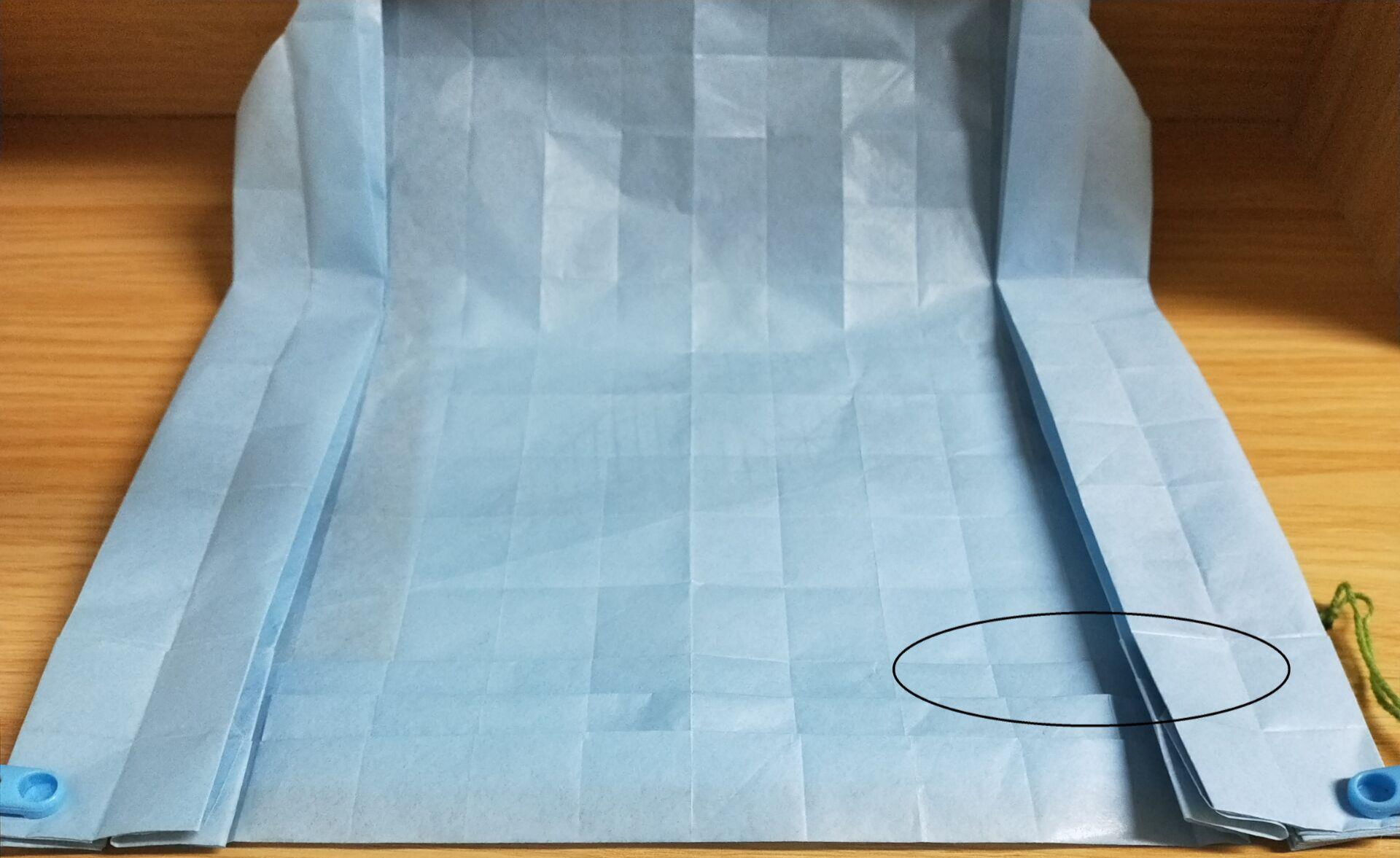
闭沉（直接推入）

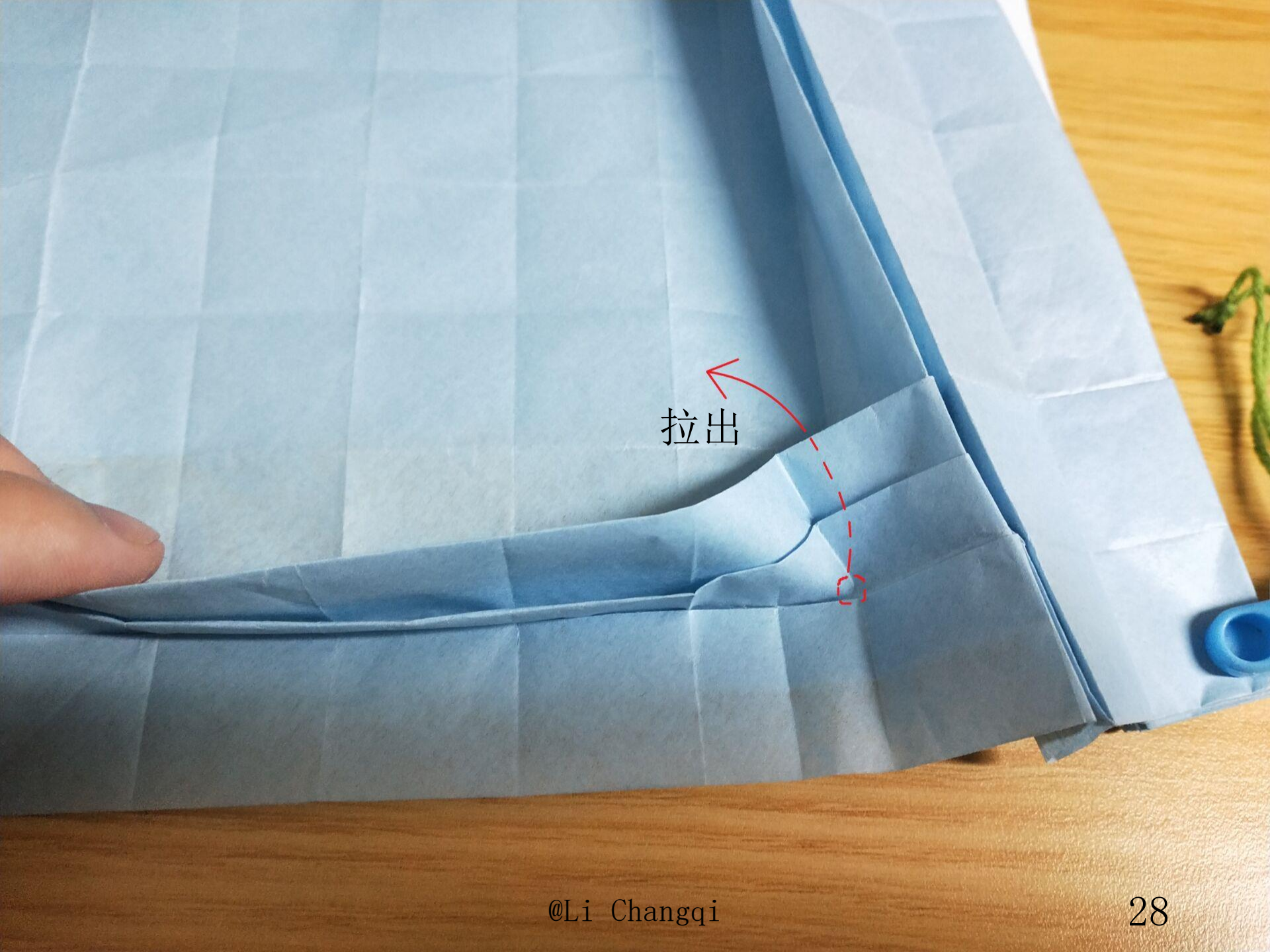


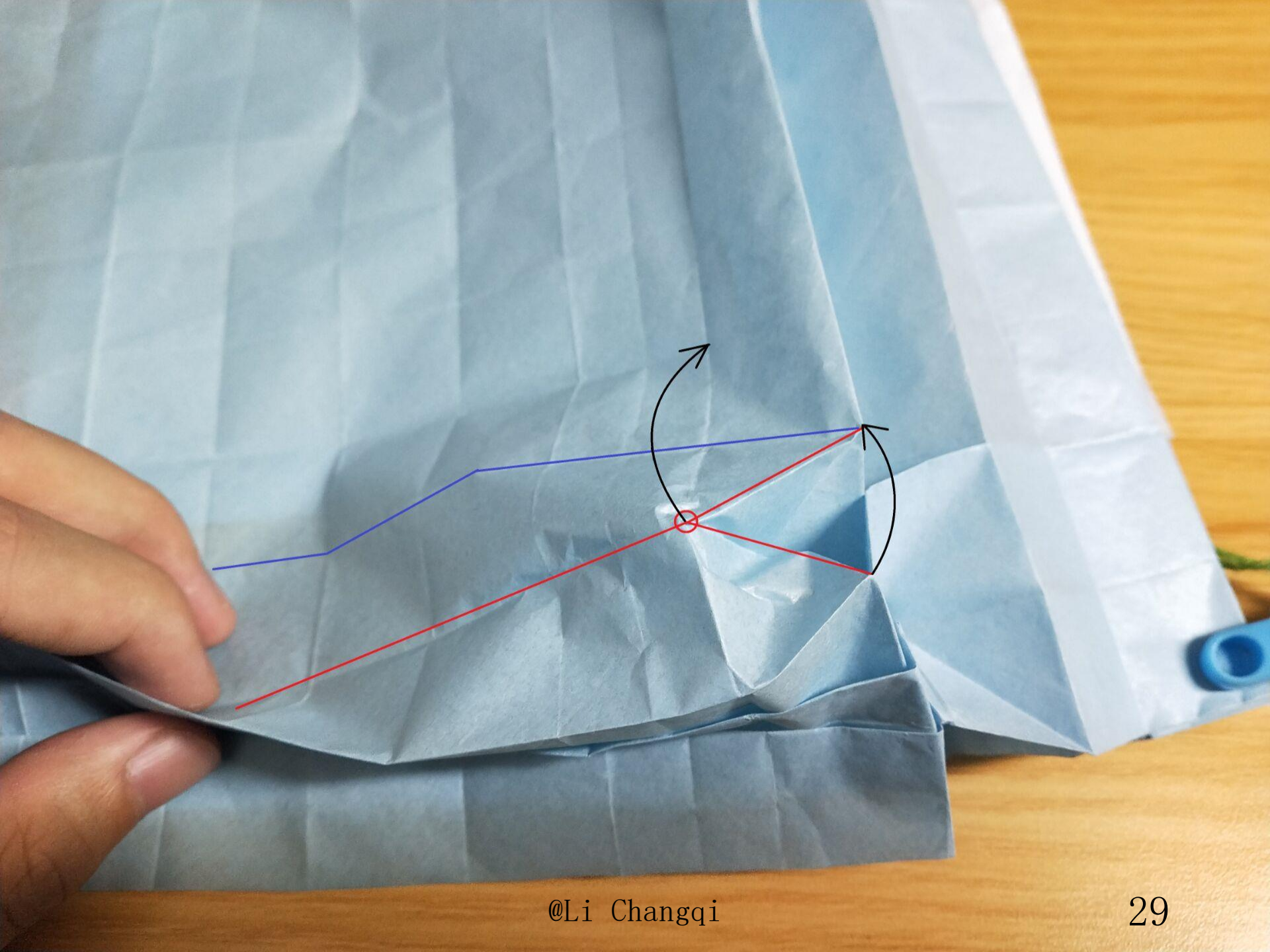









拉出




左侧重复




拉开

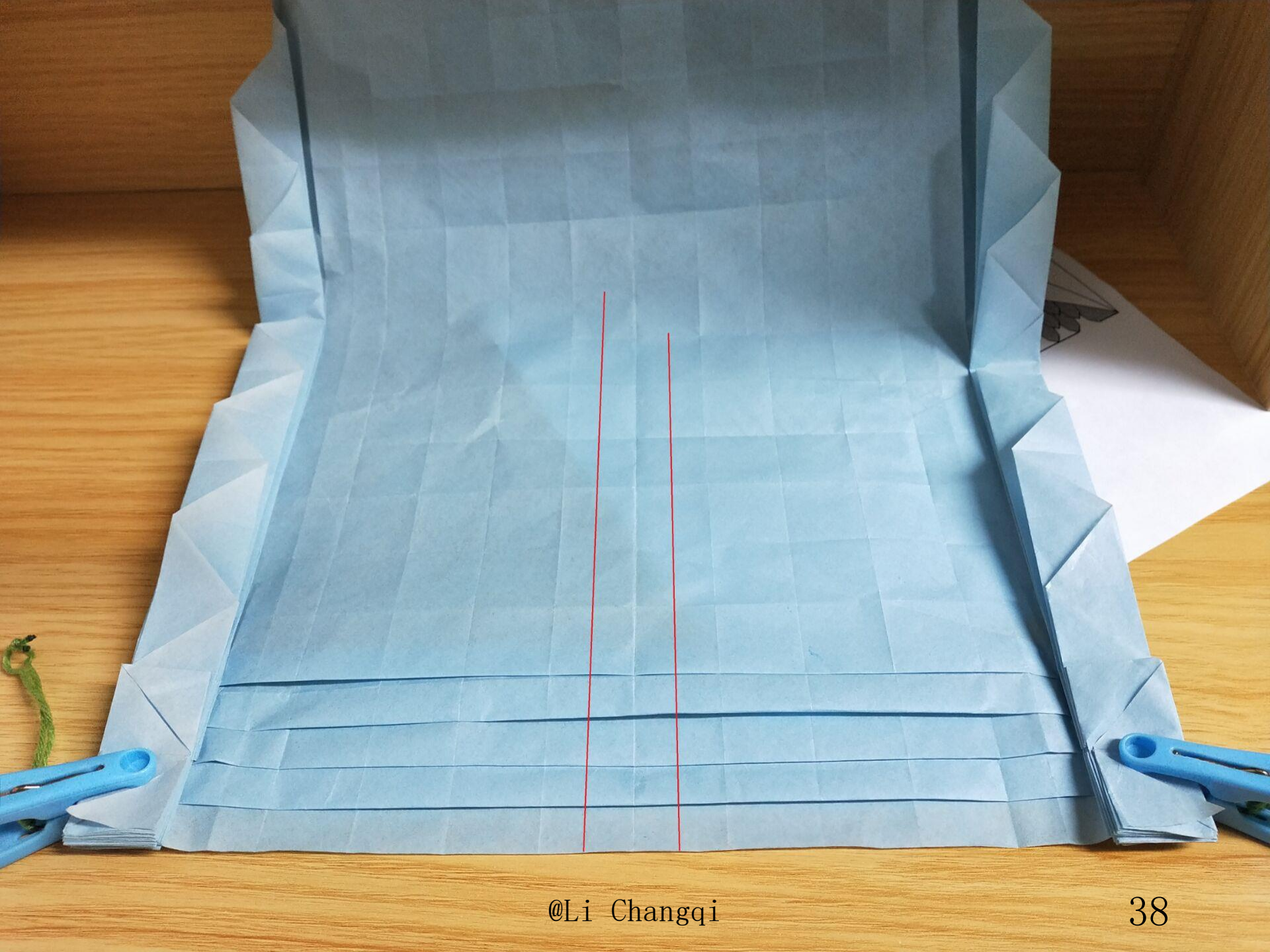


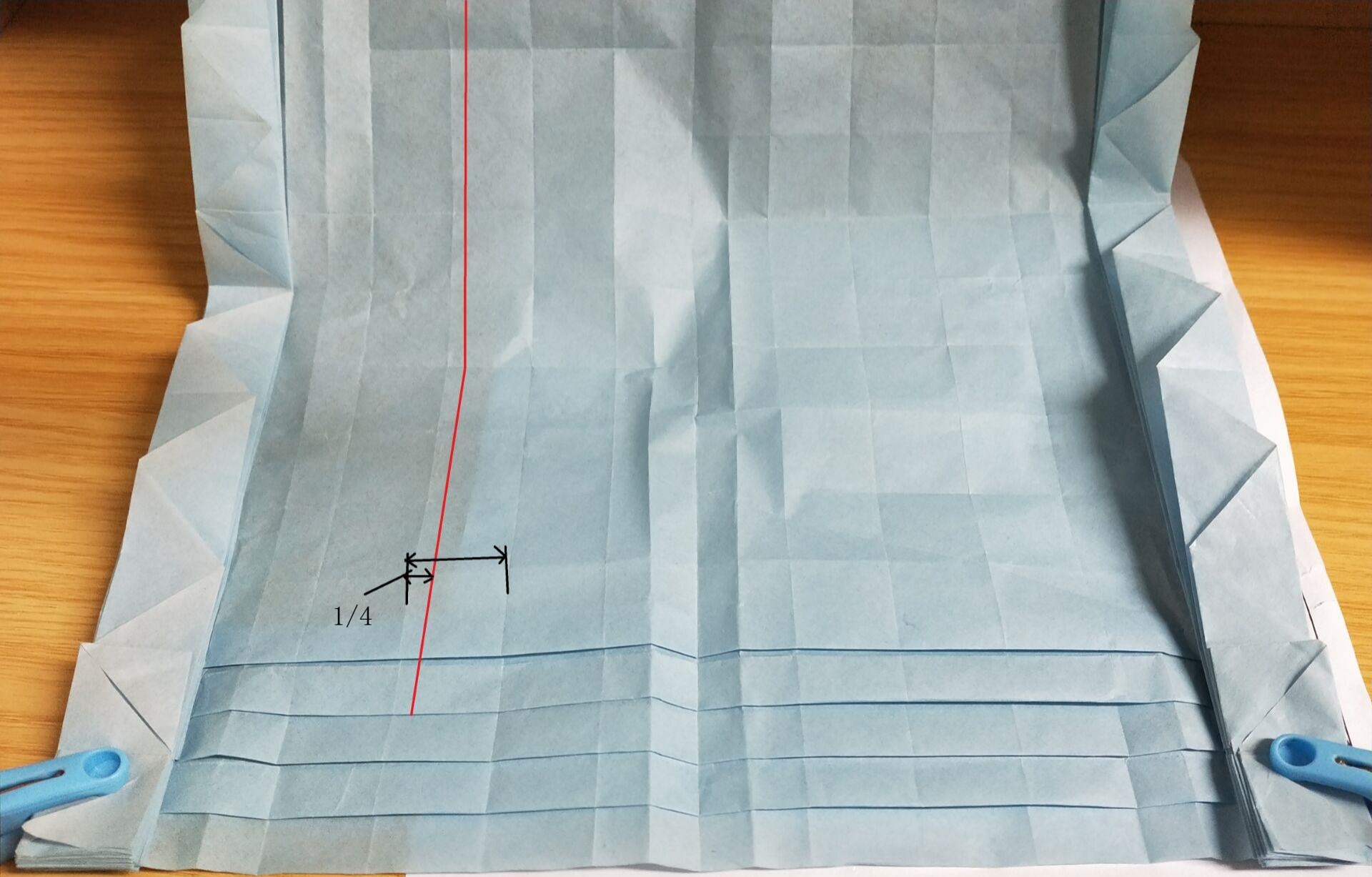

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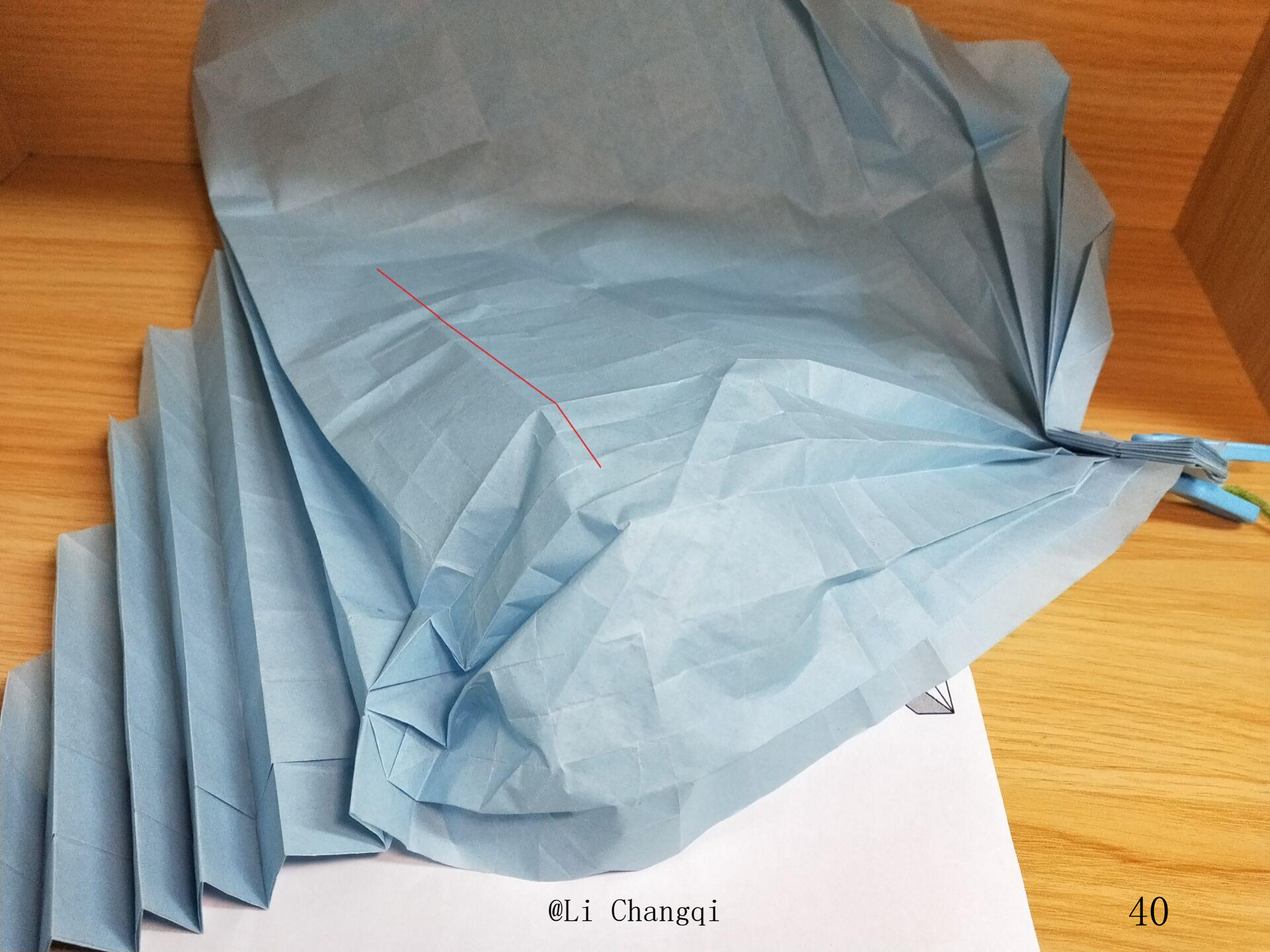




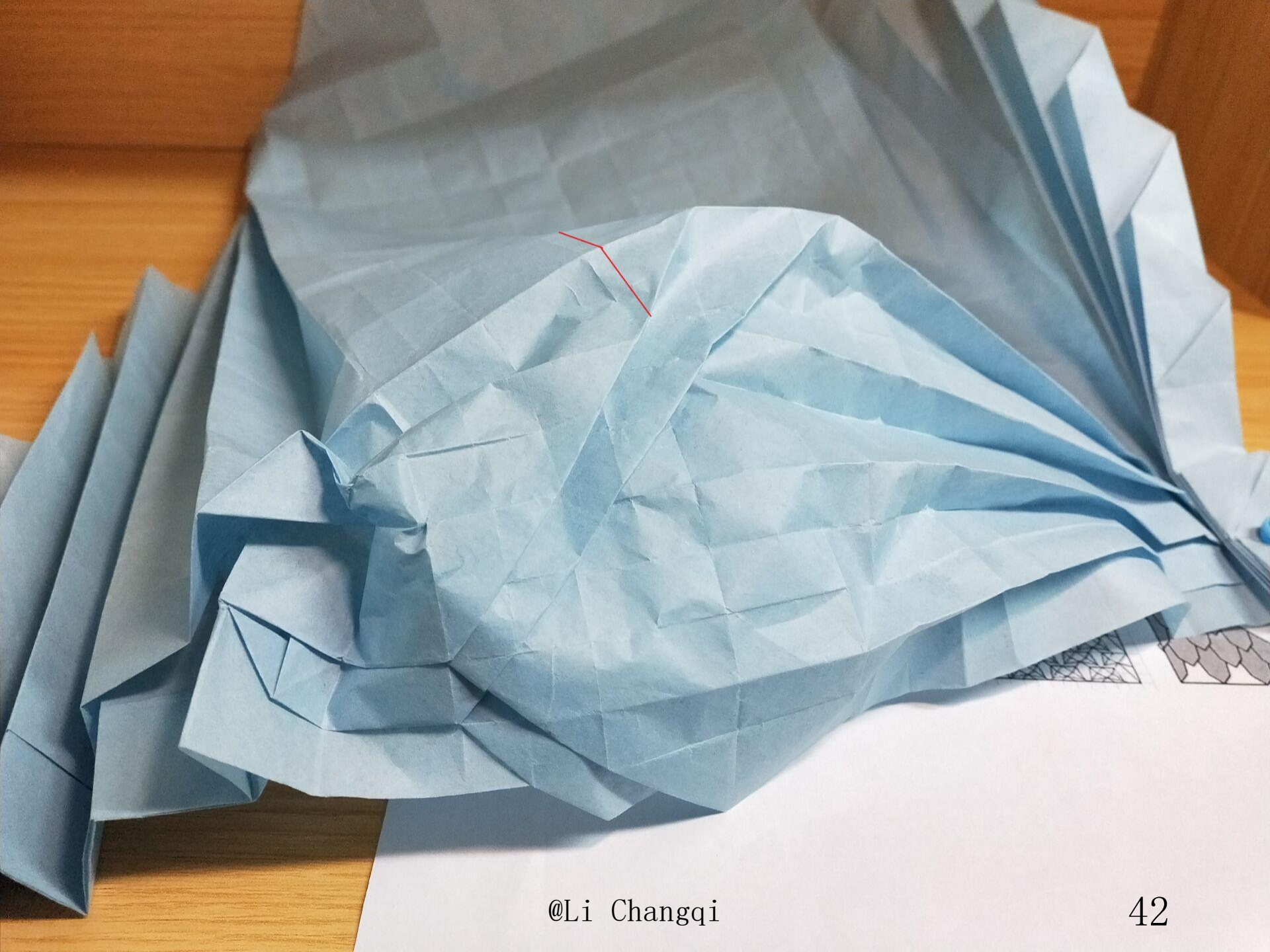




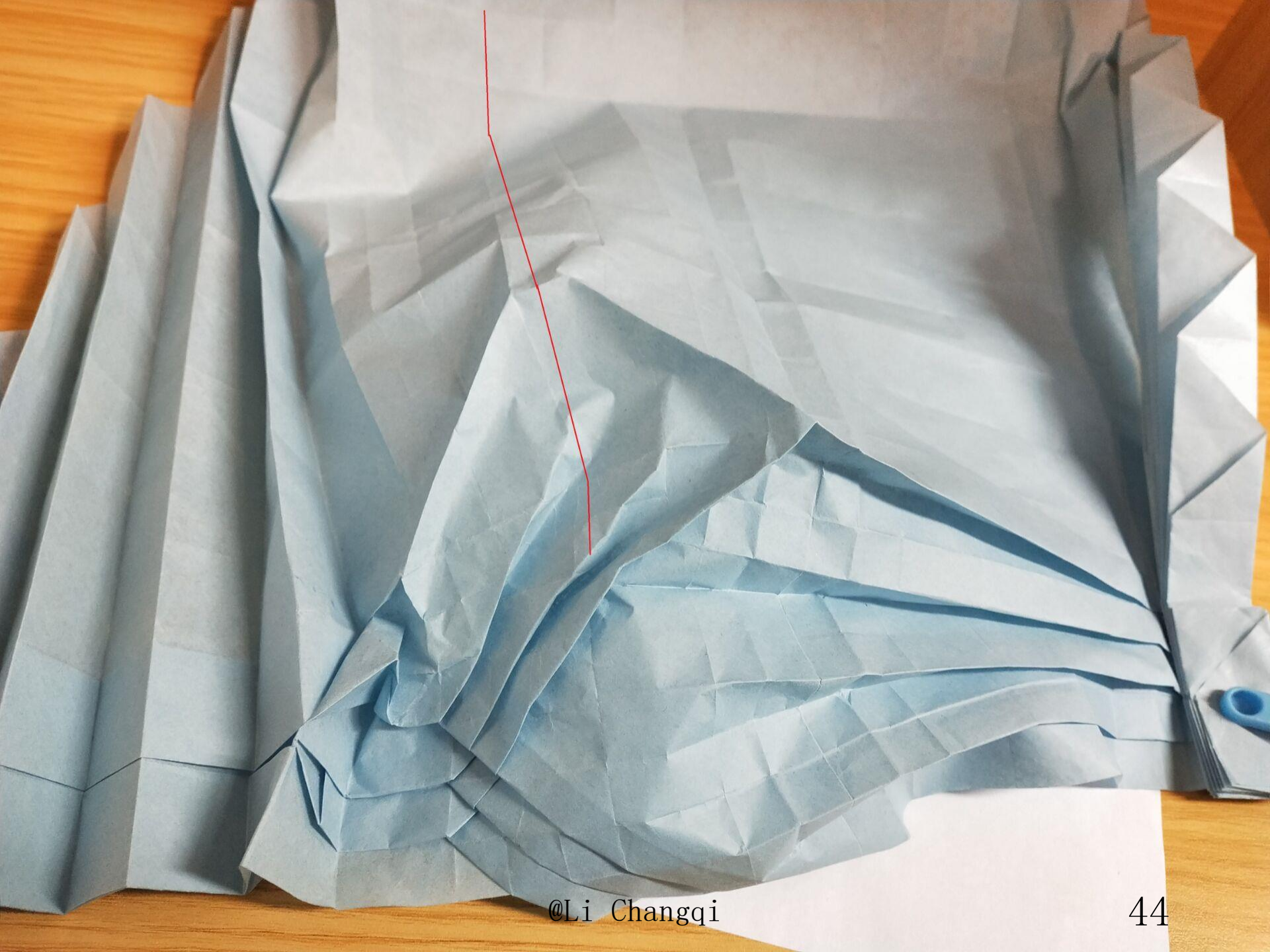

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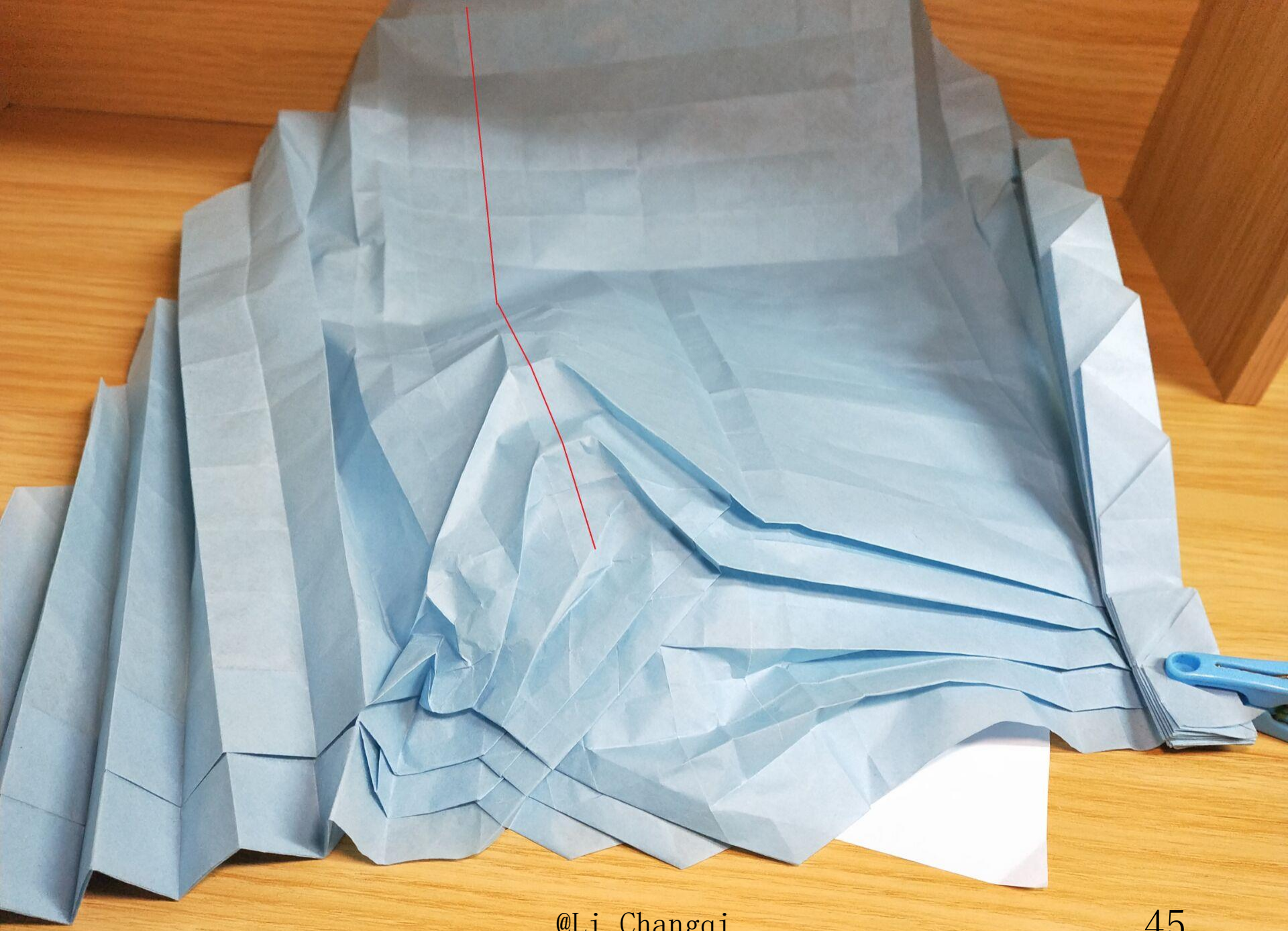






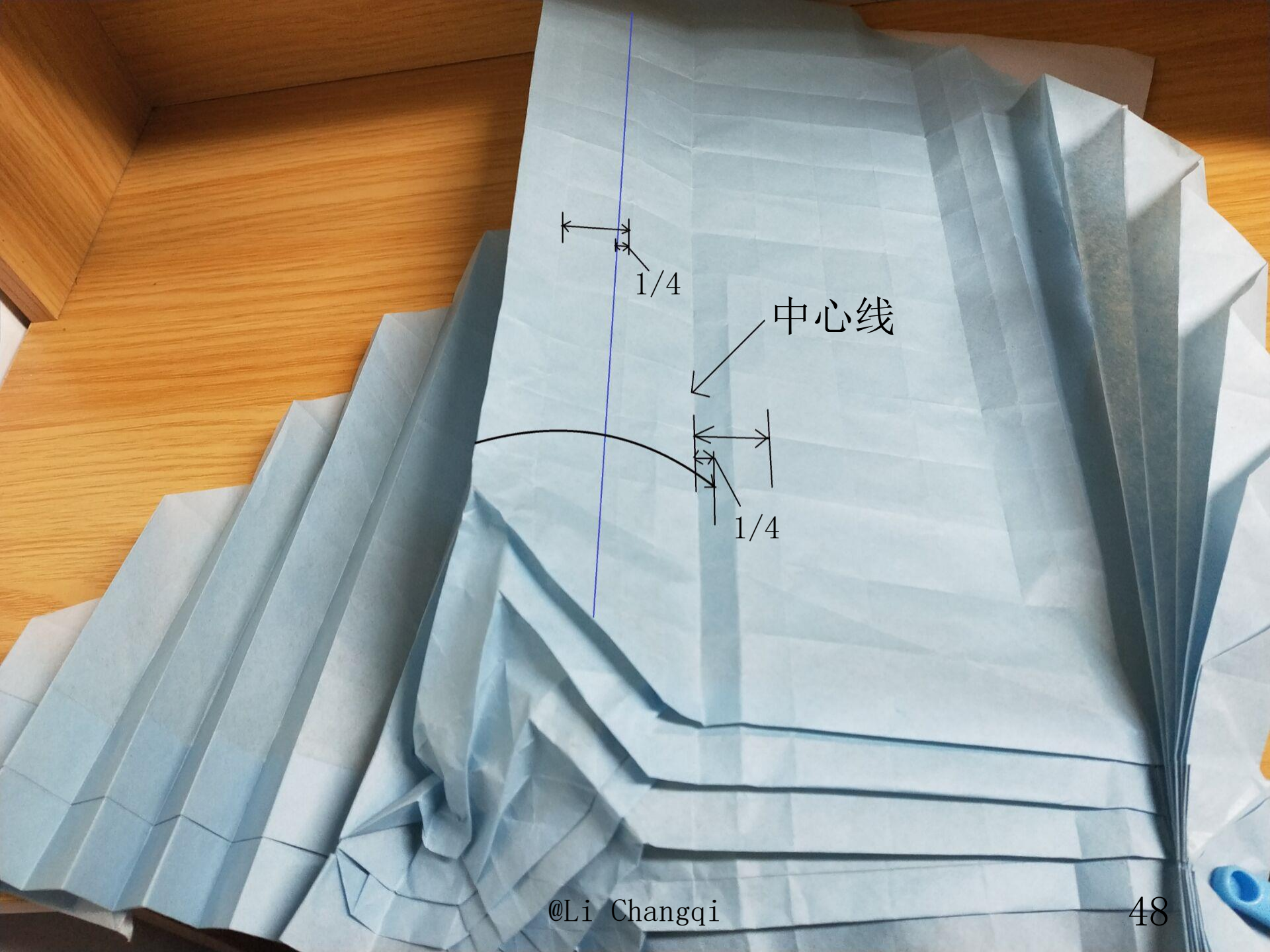






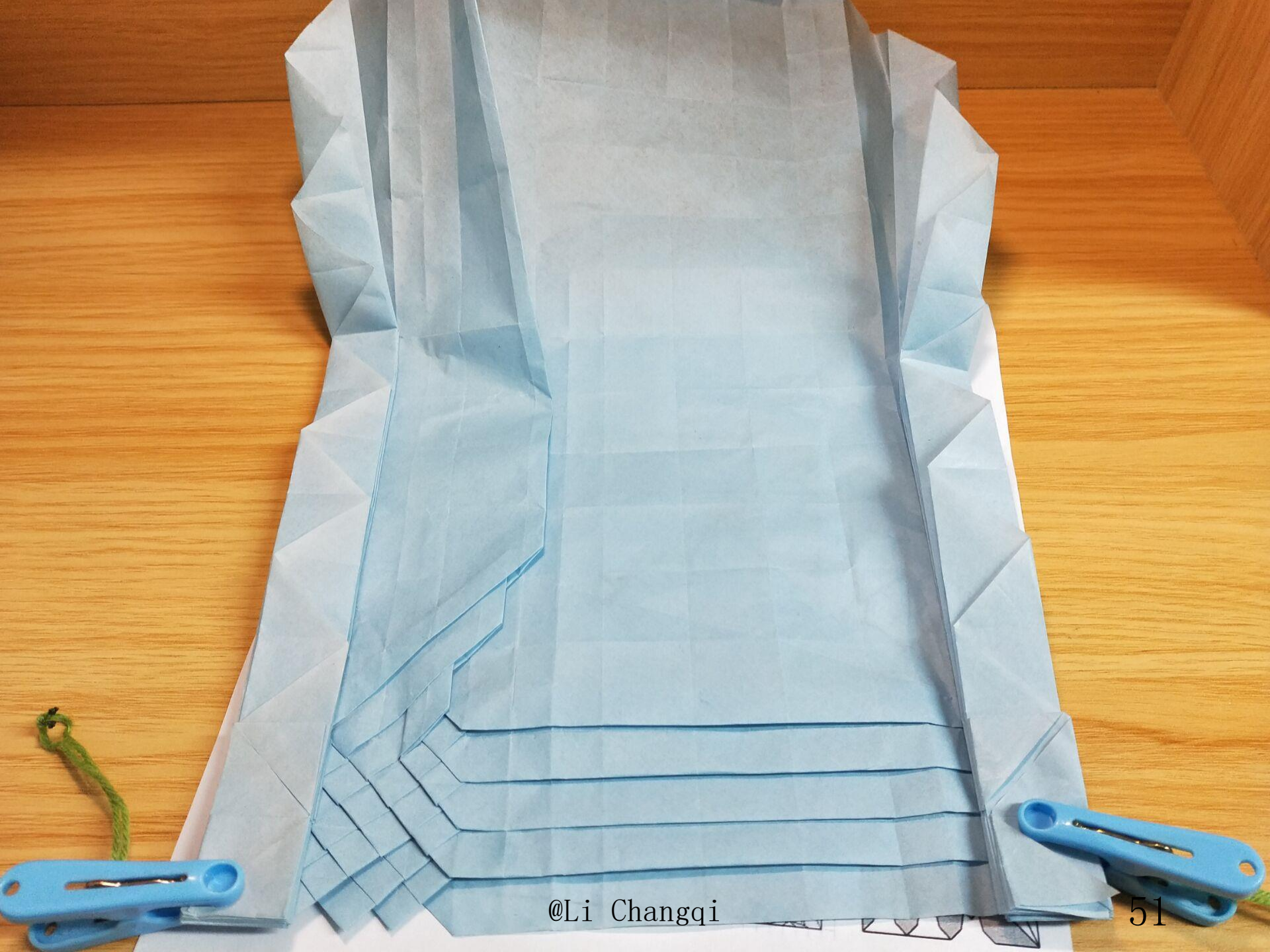





1/4
中心线
1/4















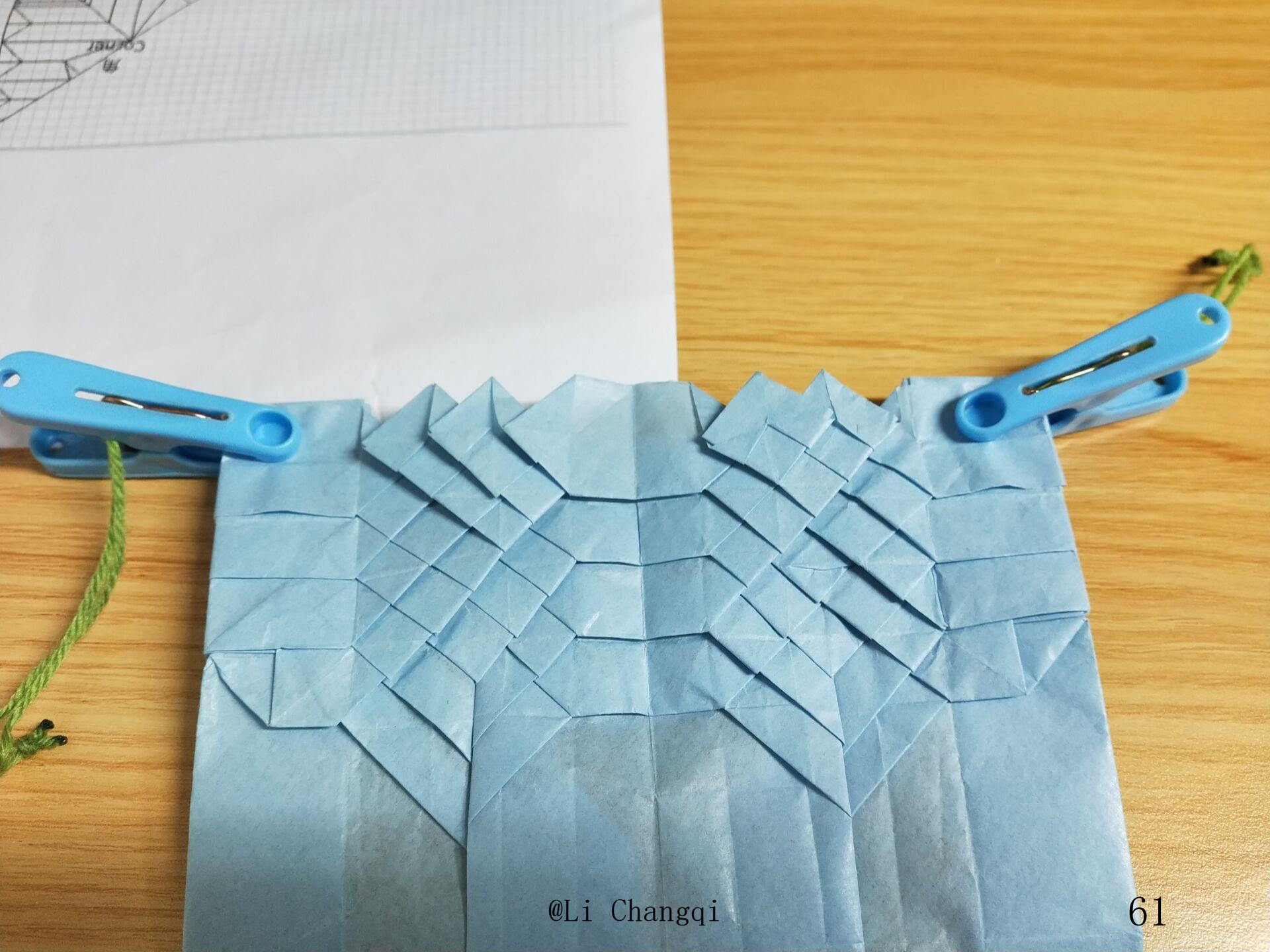


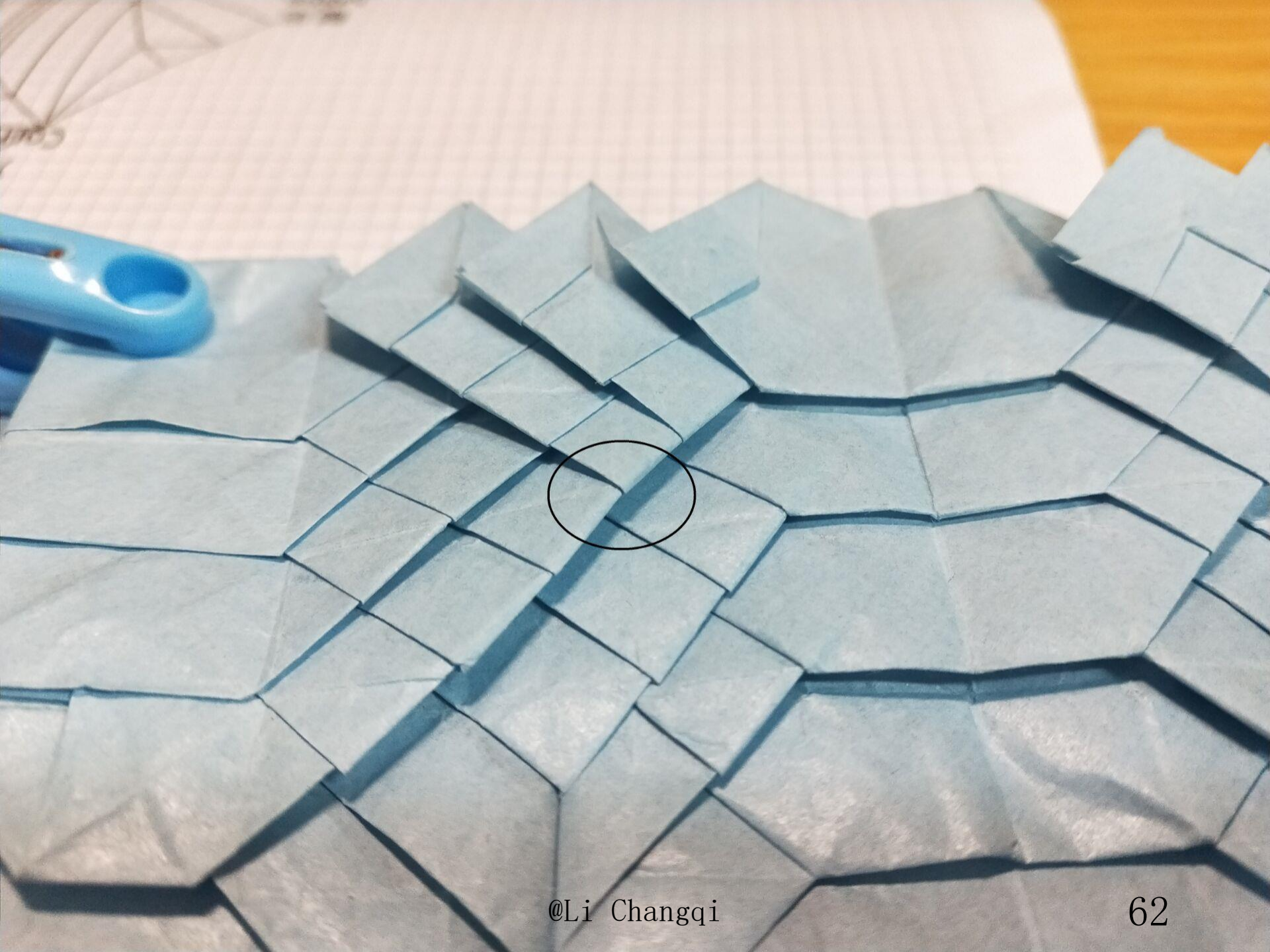


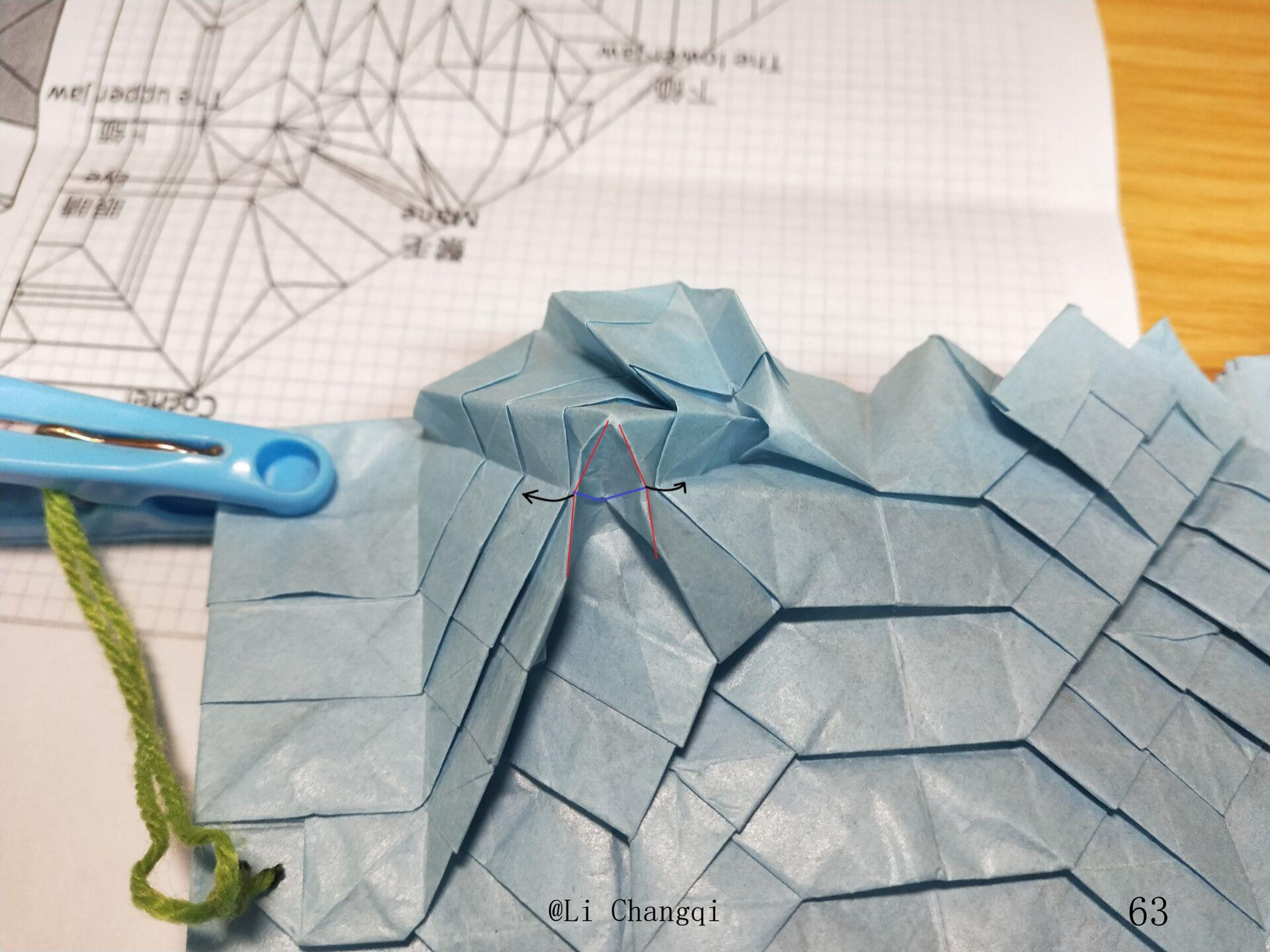


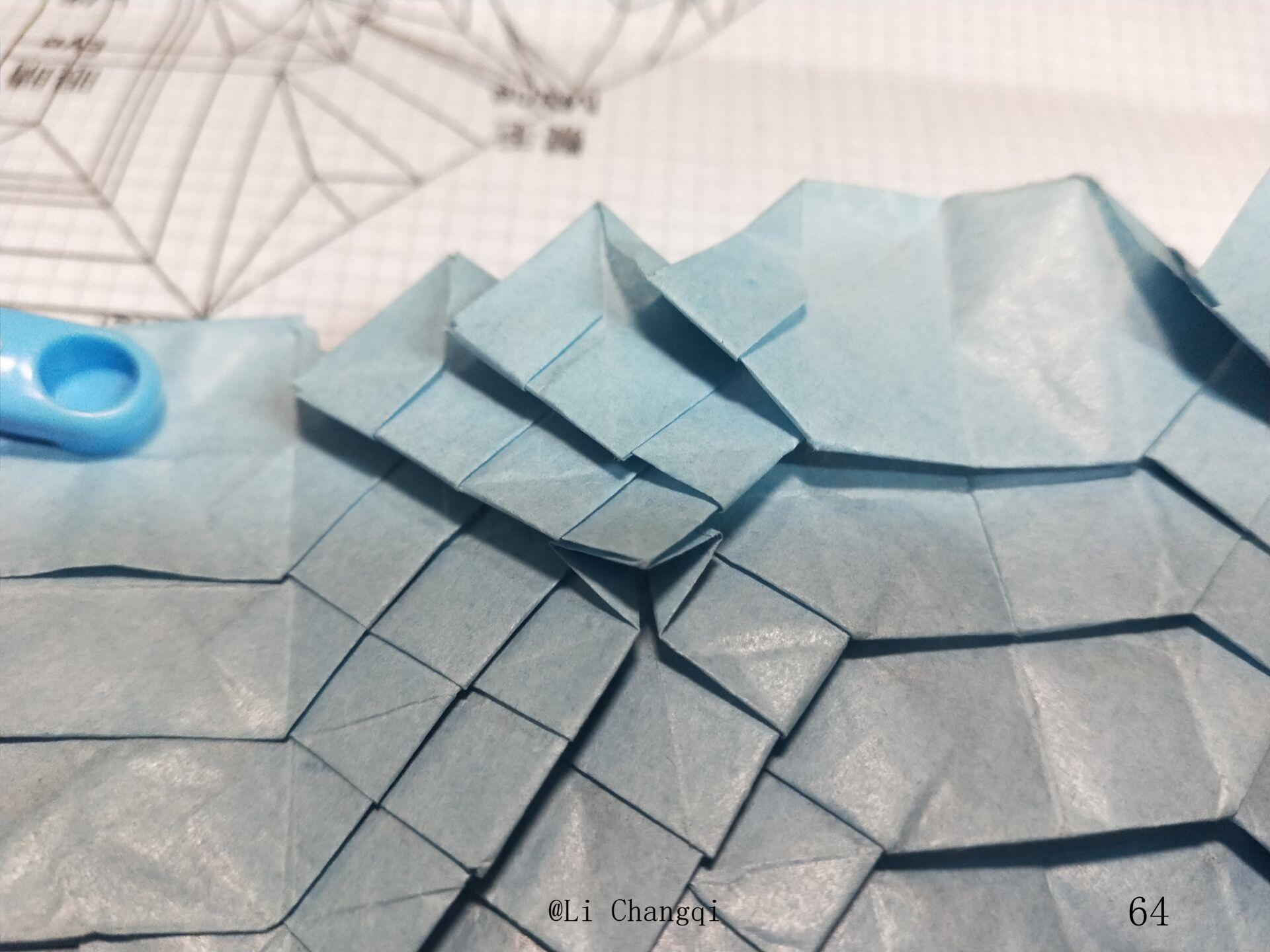


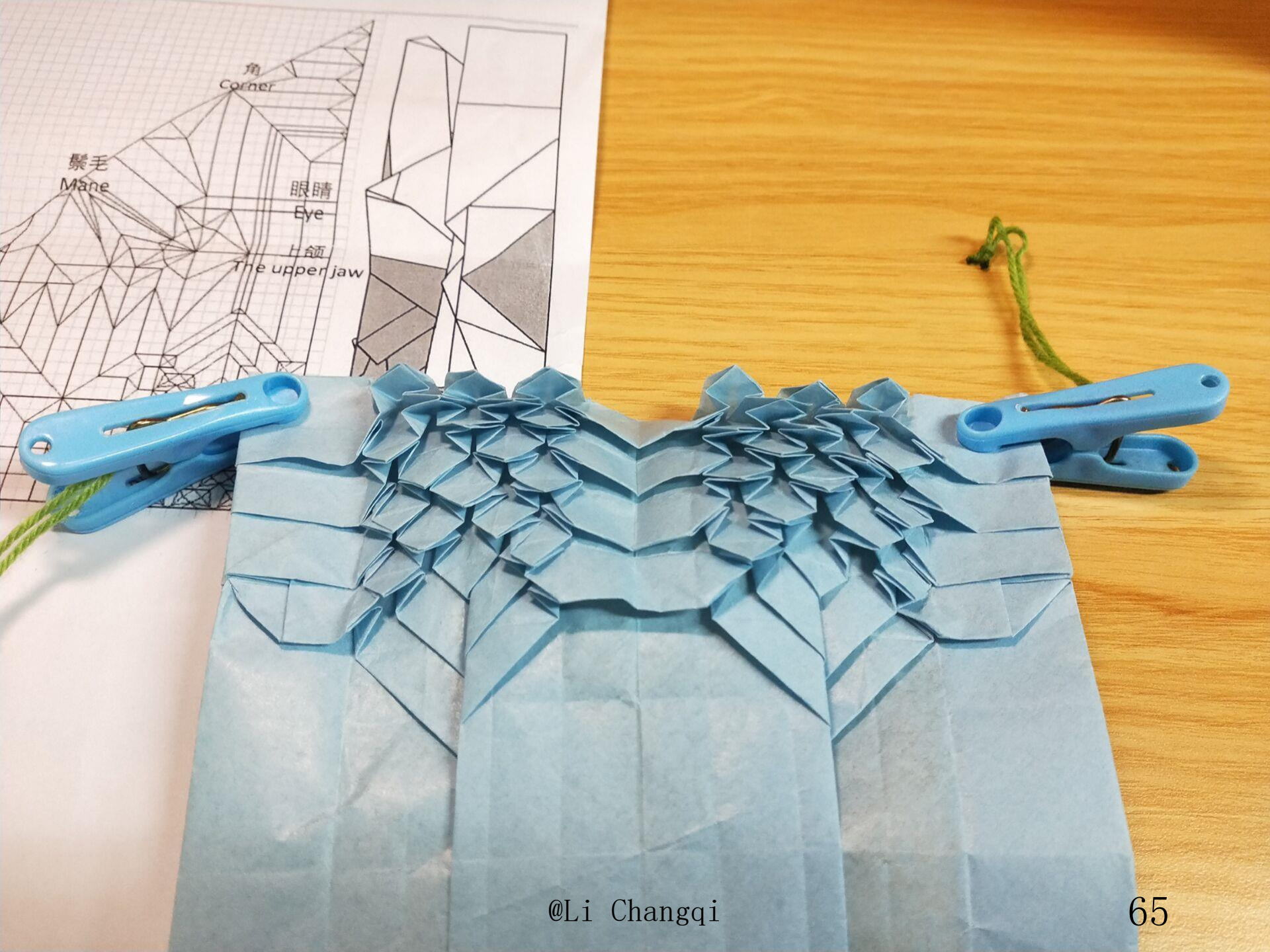

眼睛
Eye
上颌
The upper jaw

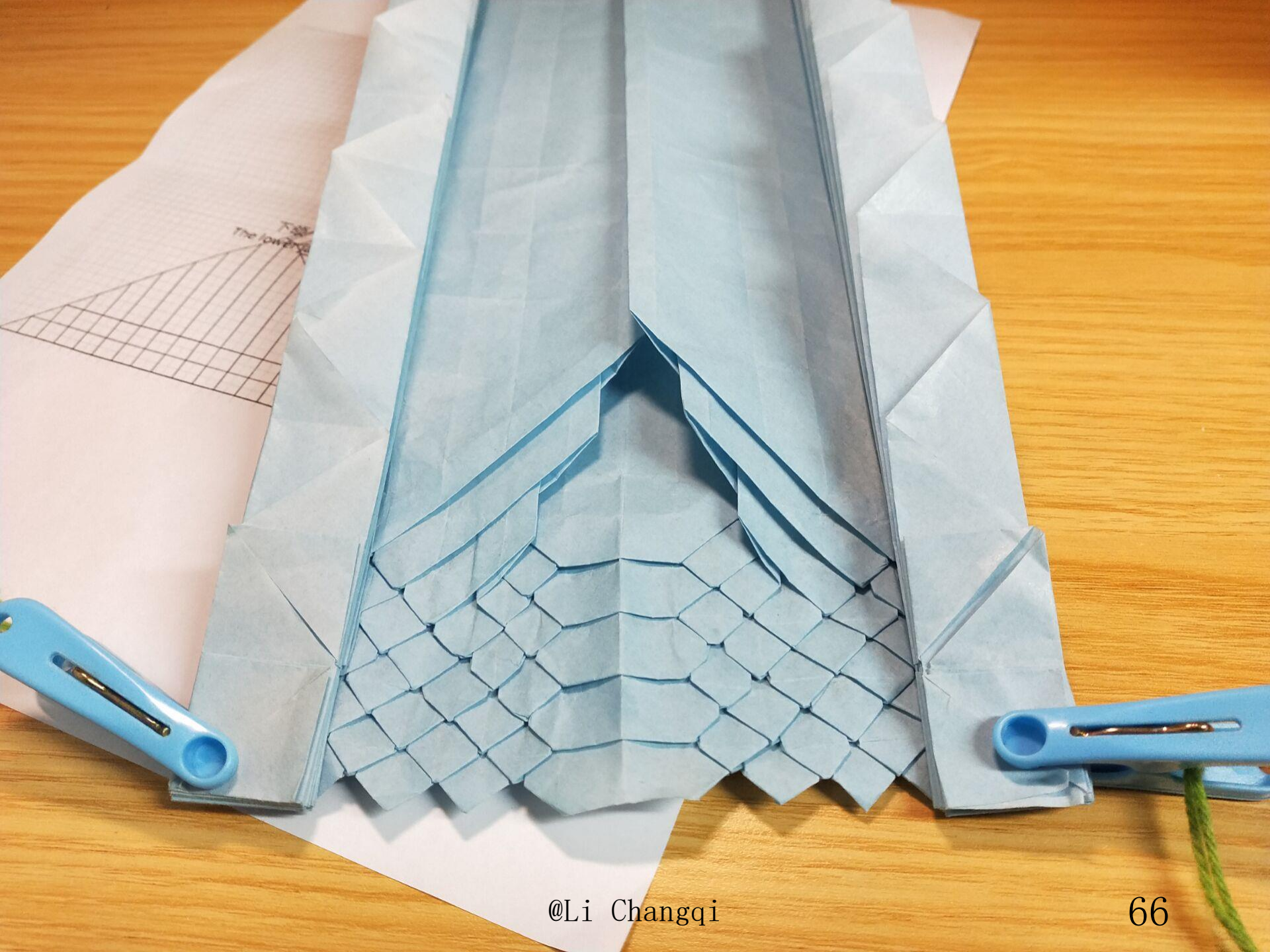




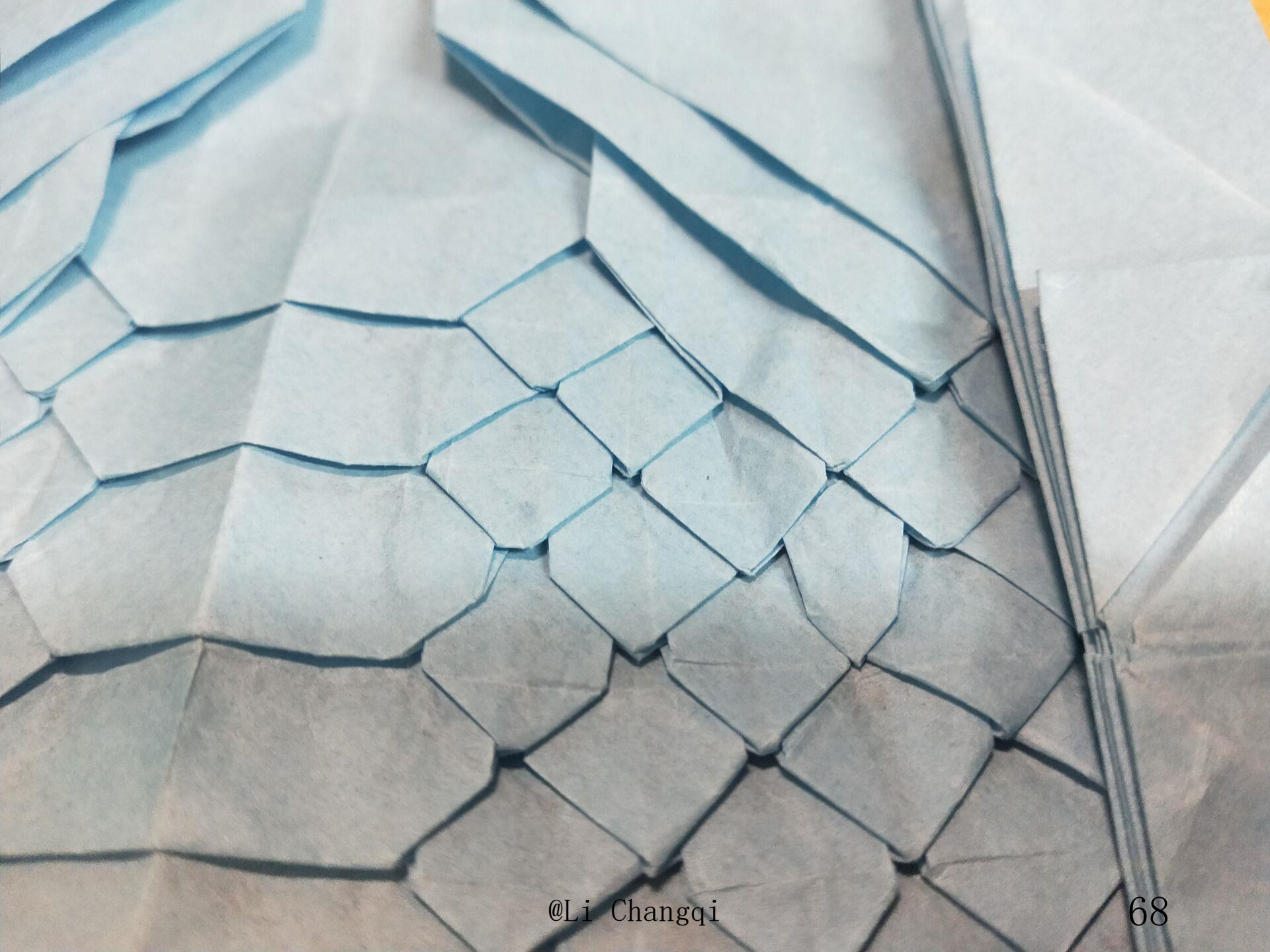




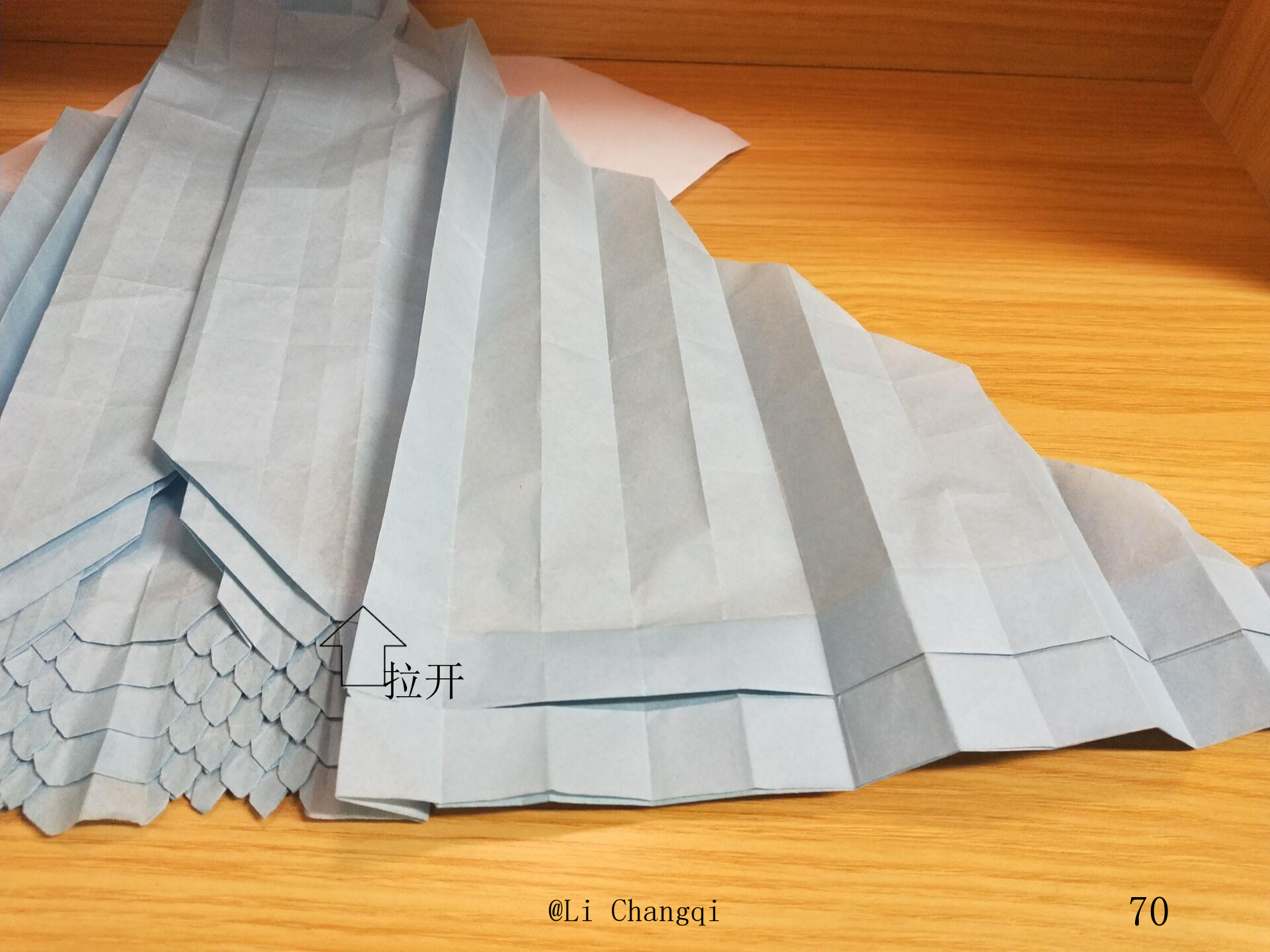

角
Corner
鬃毛
Mane
眼睛
Eye
上颌
The upper jaw

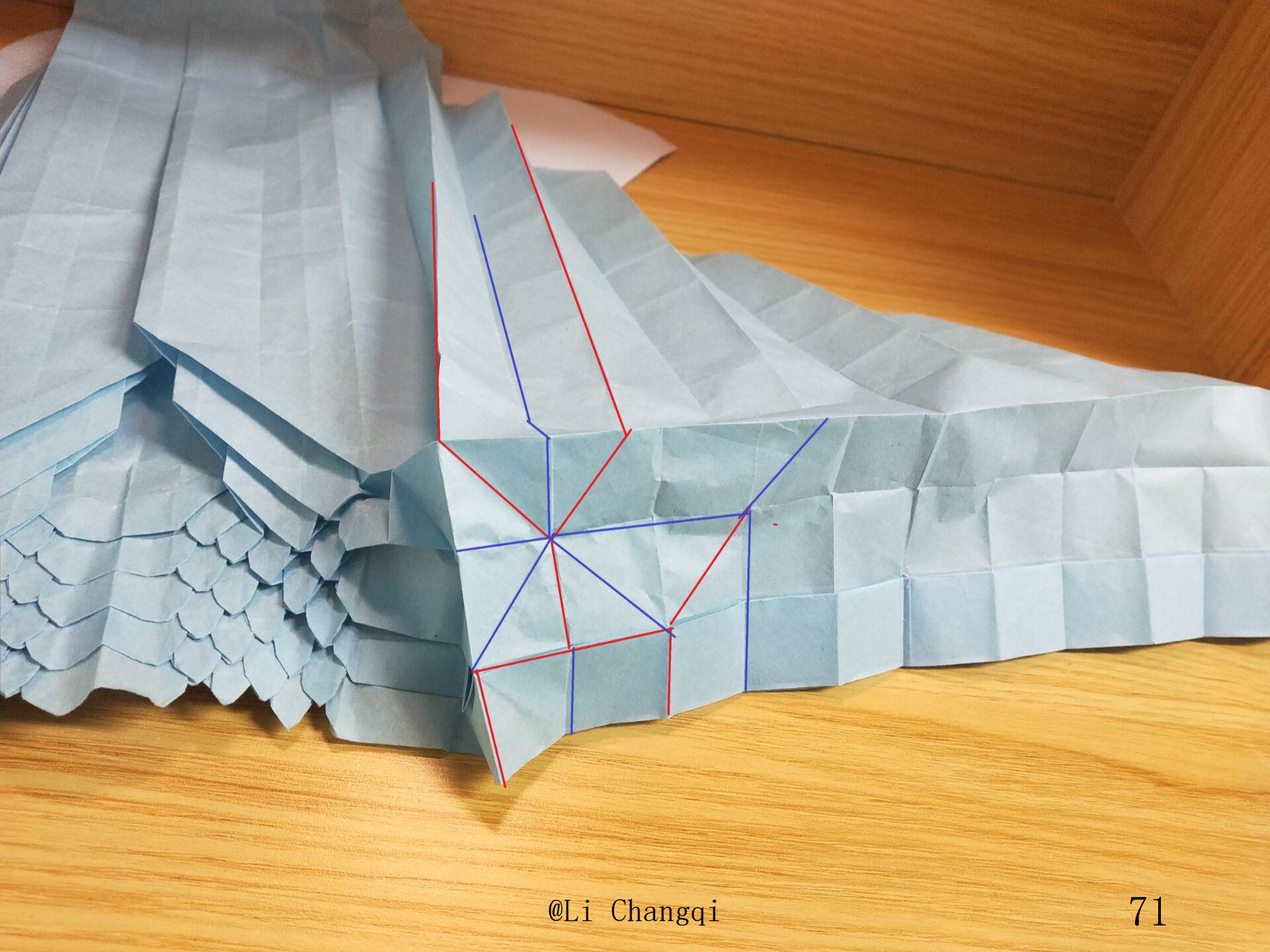



两侧推入

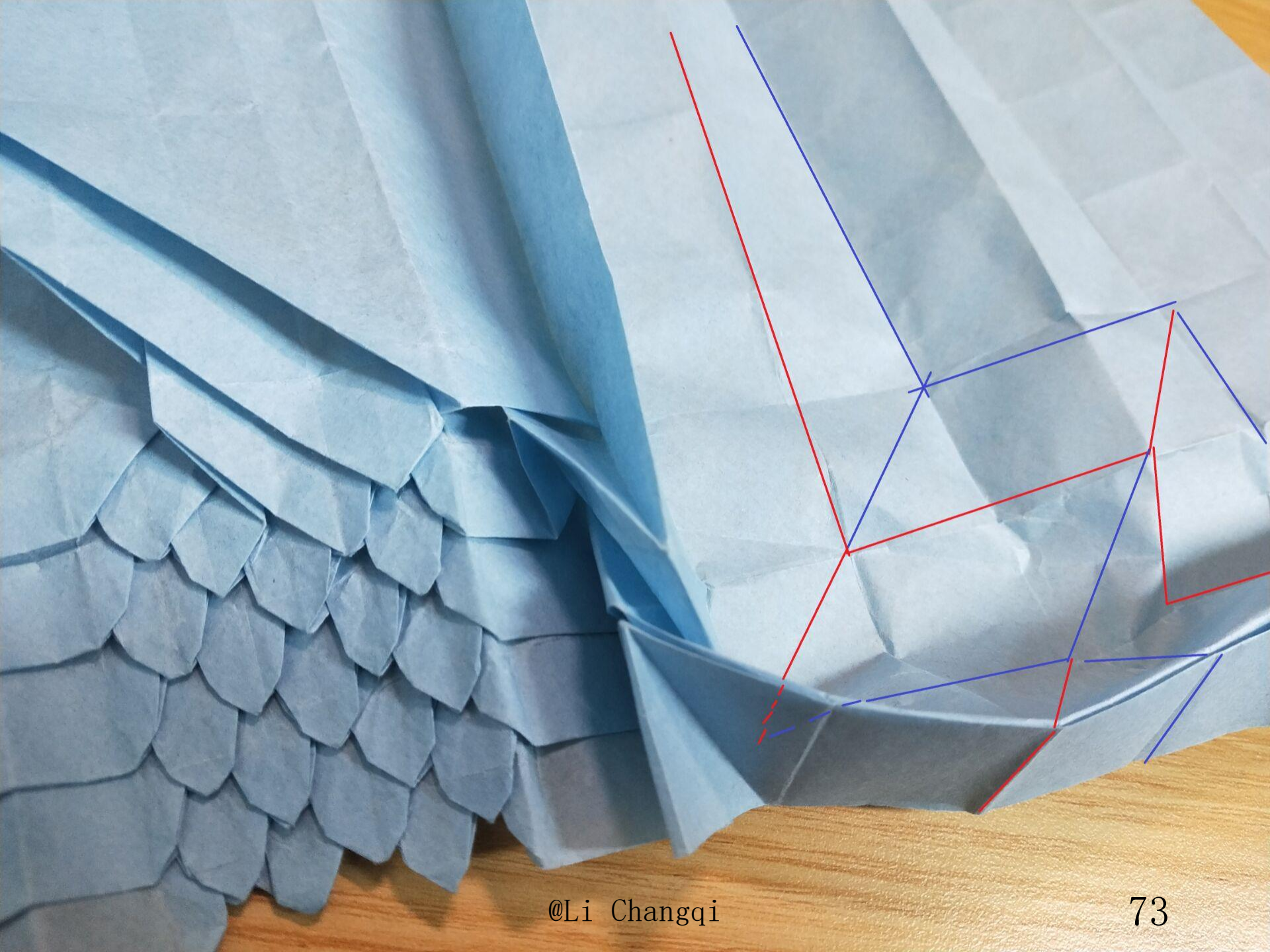


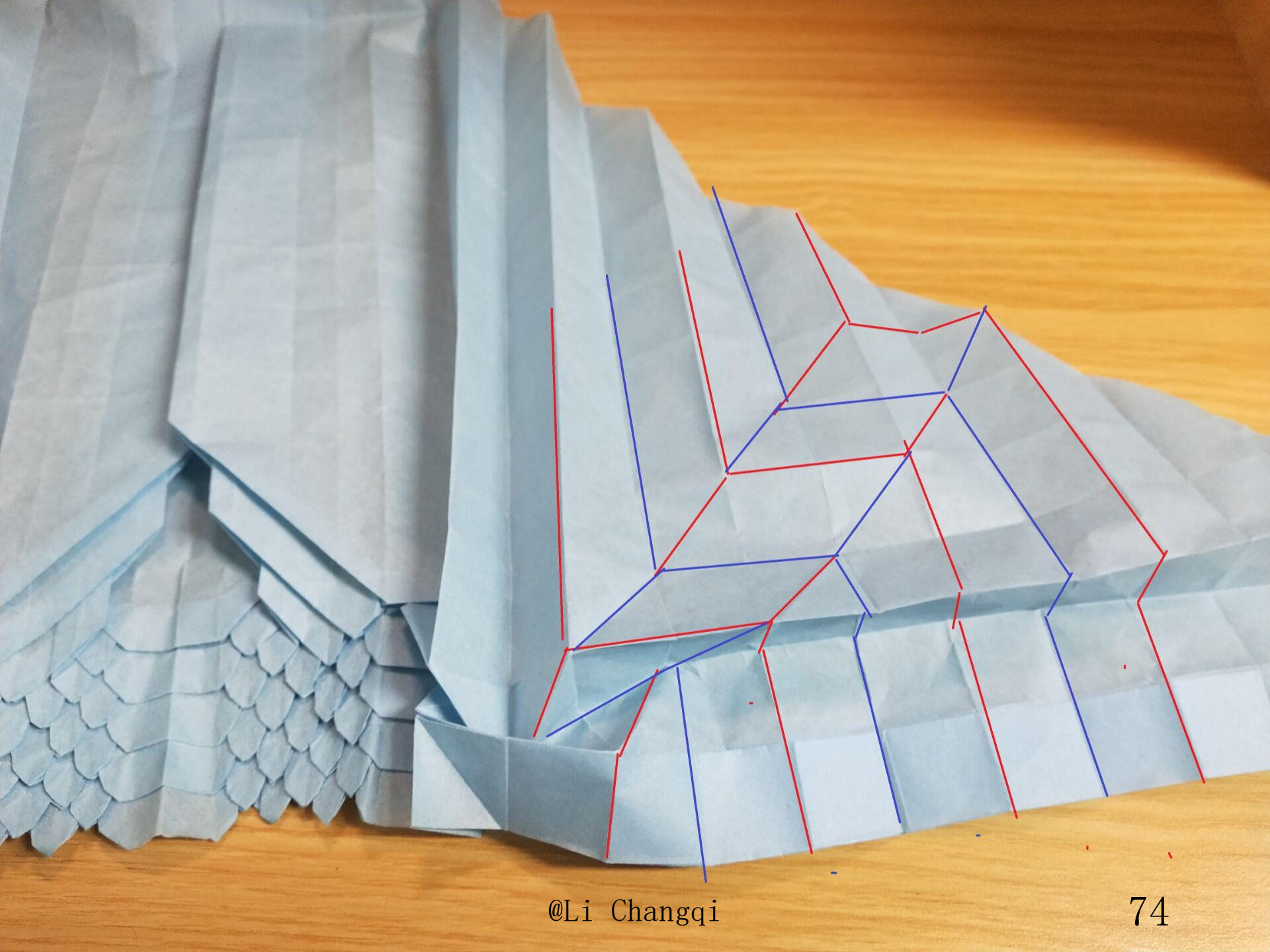


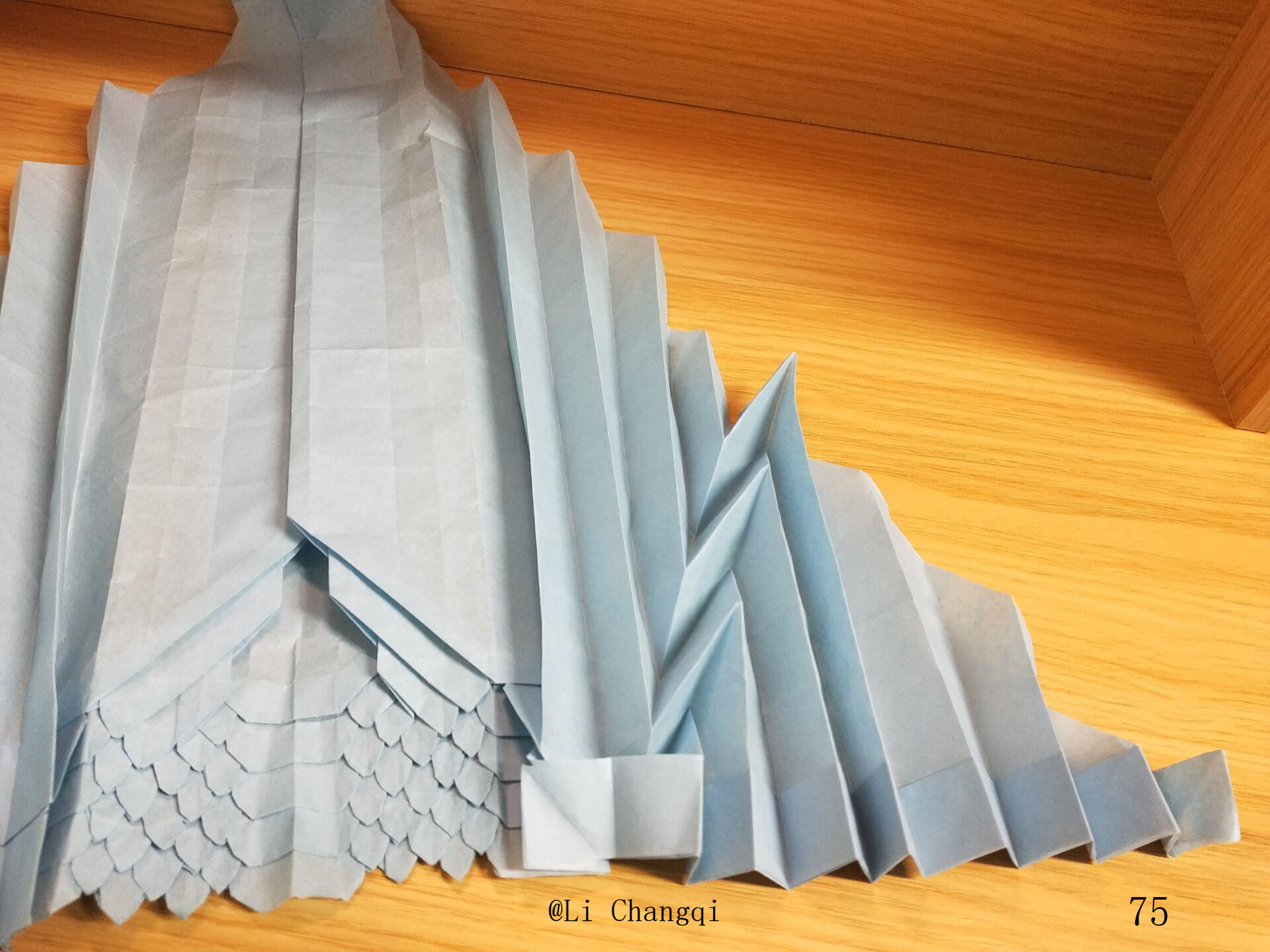

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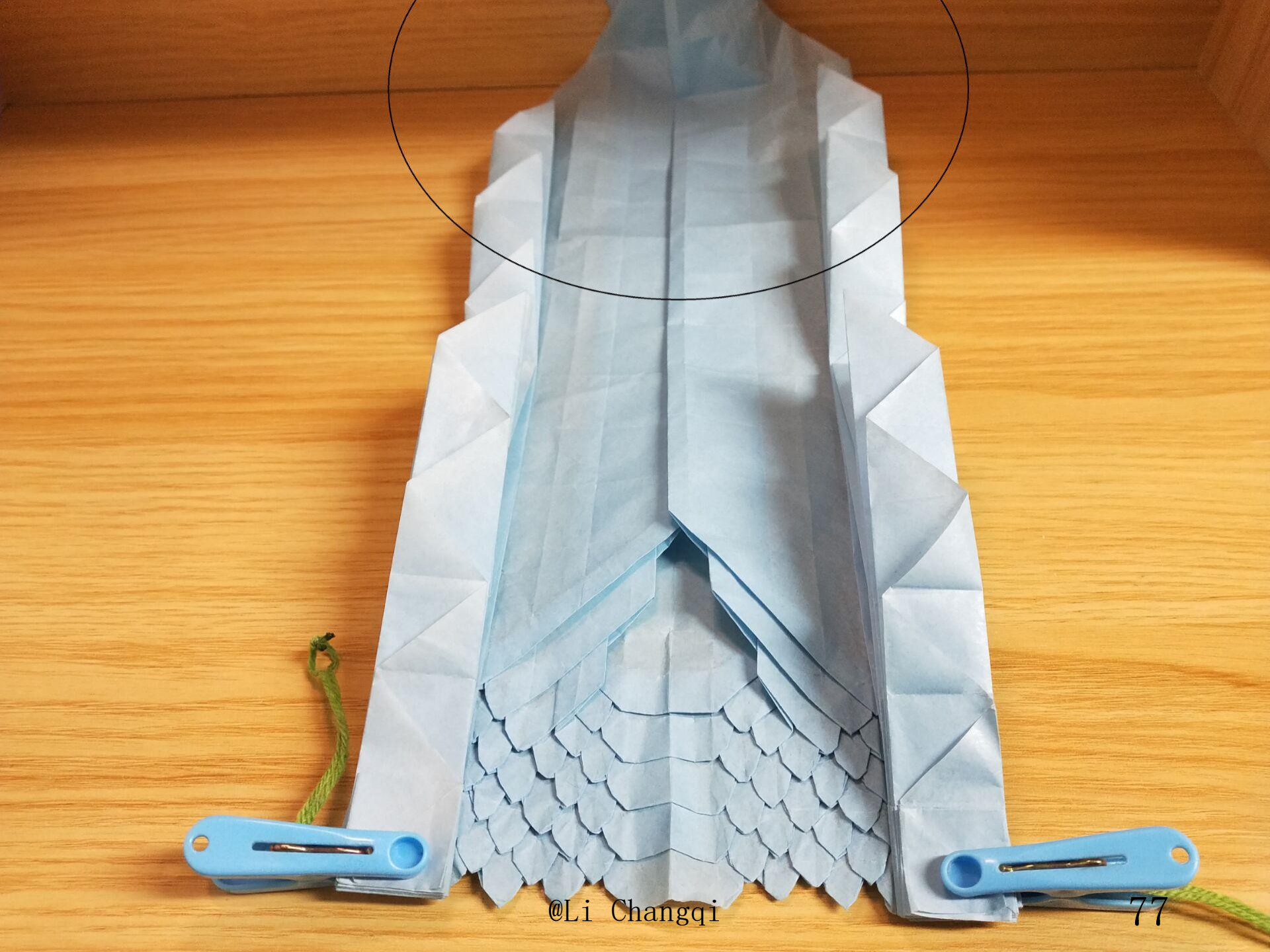

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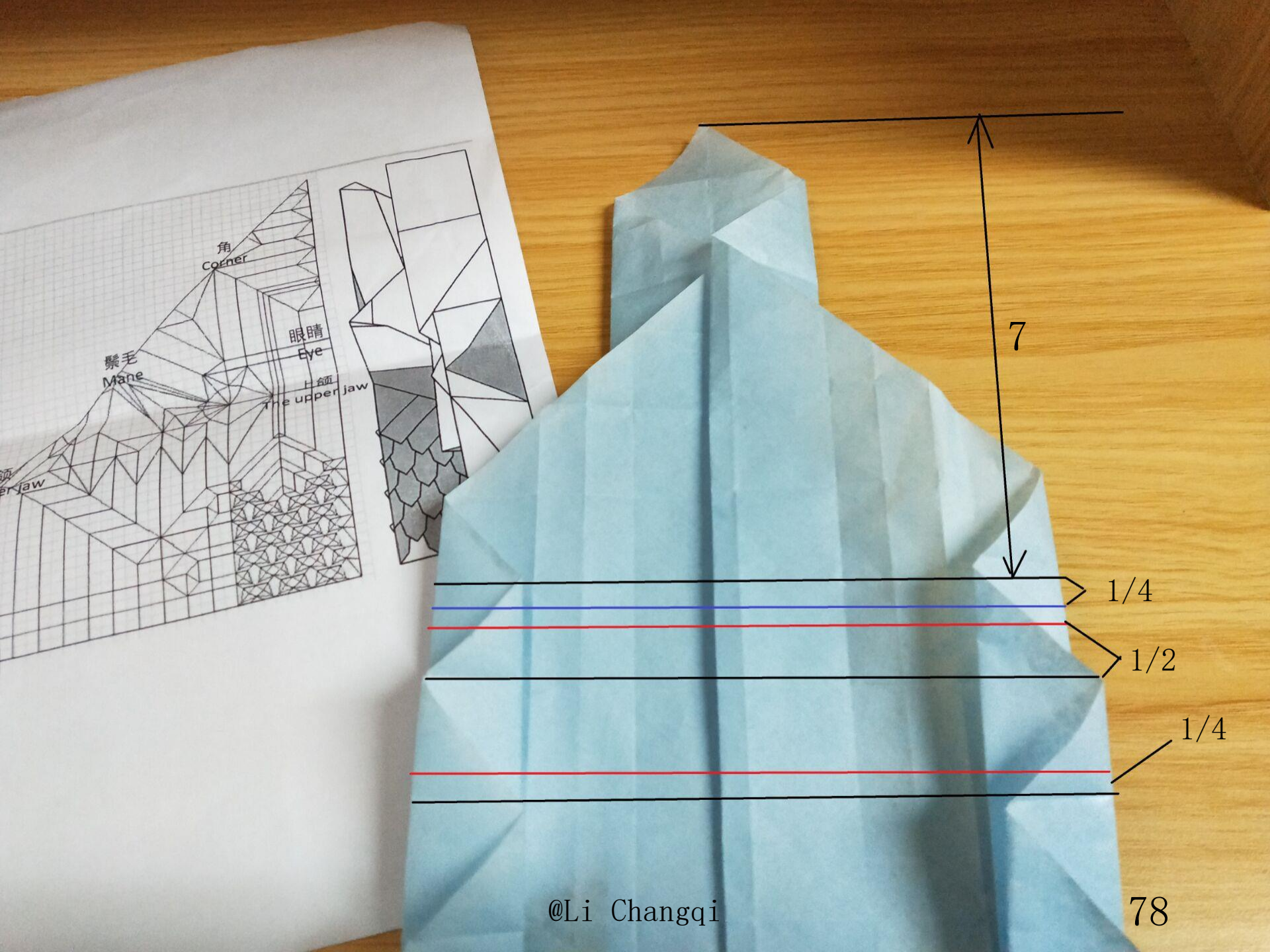




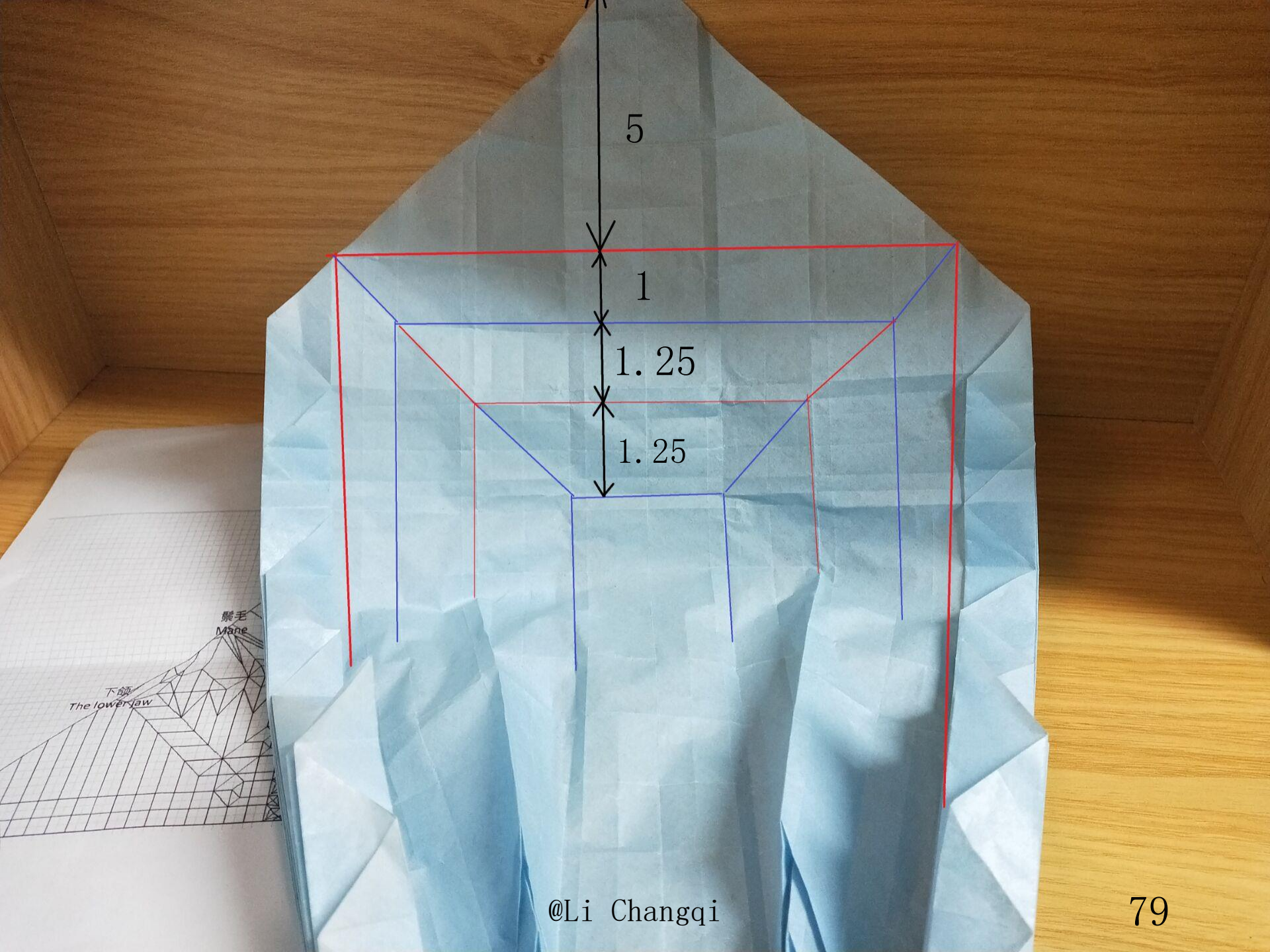



收拢



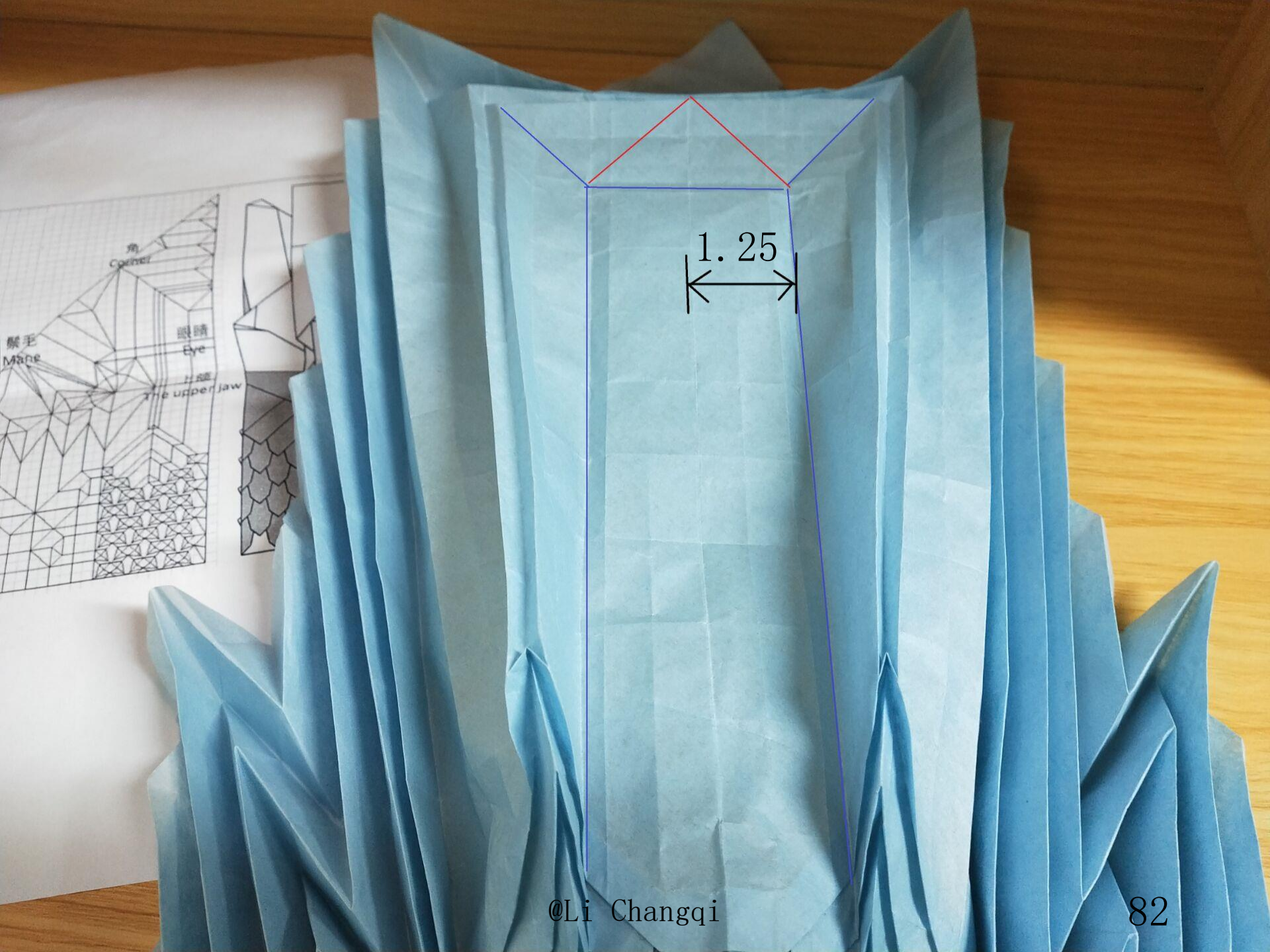


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5
1
1.25
1.25
鬃毛
Mane
下颌
The lower jaw


角
Corner
眼睛
Eye
鬃毛
Mane
上颚
The upper jaw
开沉


角
Corner
鬃毛
Mane
眼睛
Eye
上颚
The upper jaw
下颚
The lower jaw


角
Corner
鬃毛
Mane
眼睛
Eye
The upper jaw
1.25


鬃毛
Mane


角
Corner
眼睛
Eye
鬃毛
Mane
上颚
The upper jaw
下颚
lower jaw


角
Corner
眼睛
Eye
鬃毛
Mane
上颚
The upper jaw
下颚
The lower jaw

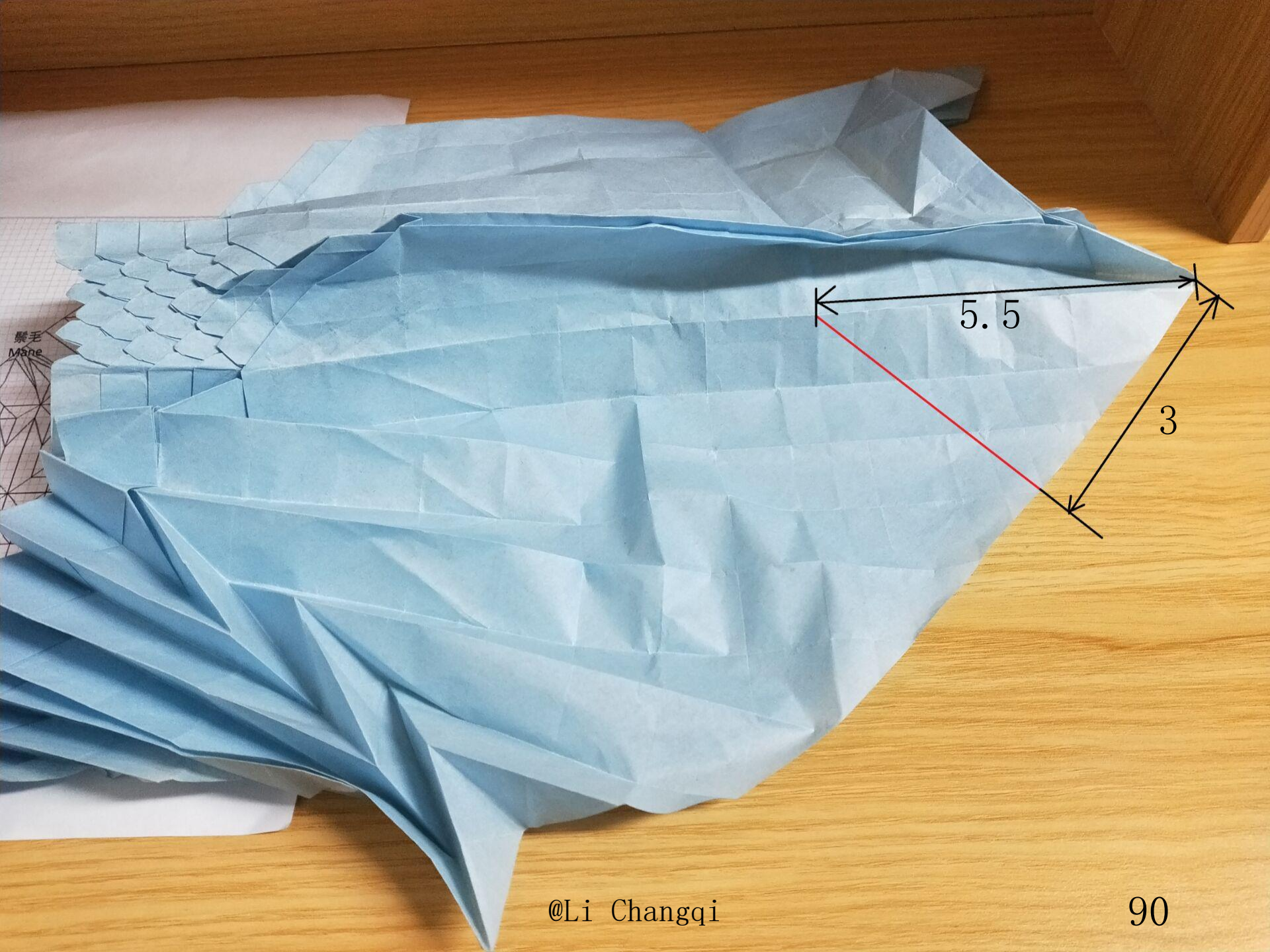


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角
Corner
眼睛
Eye
鬃毛
Mane
上颌
The upper jaw
下颌
The lower jaw
切换视角


下颌
the lower jaw


眼睛
Eye
上颌
The upper jaw


鬃毛
Mane
5.5
3



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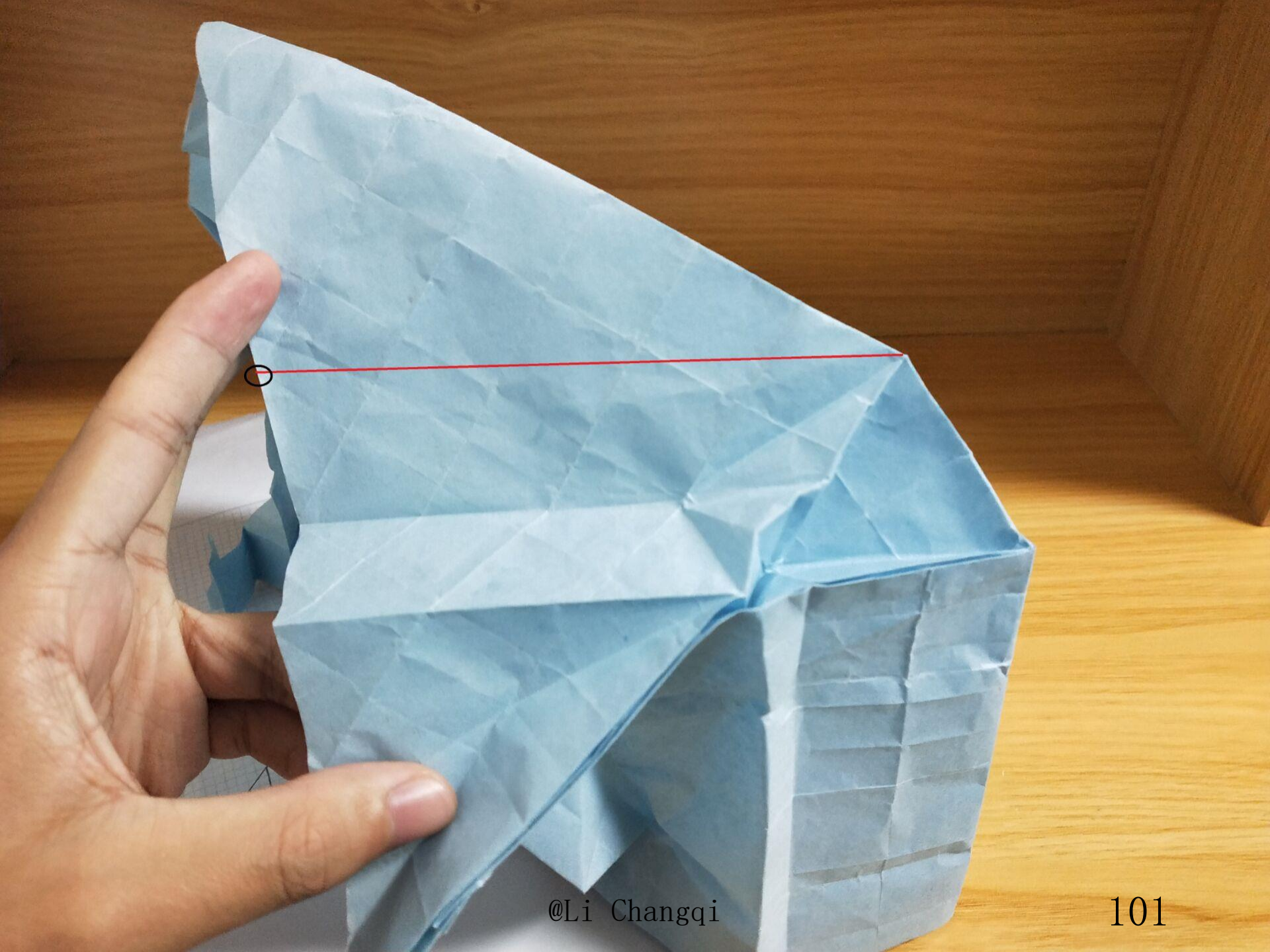




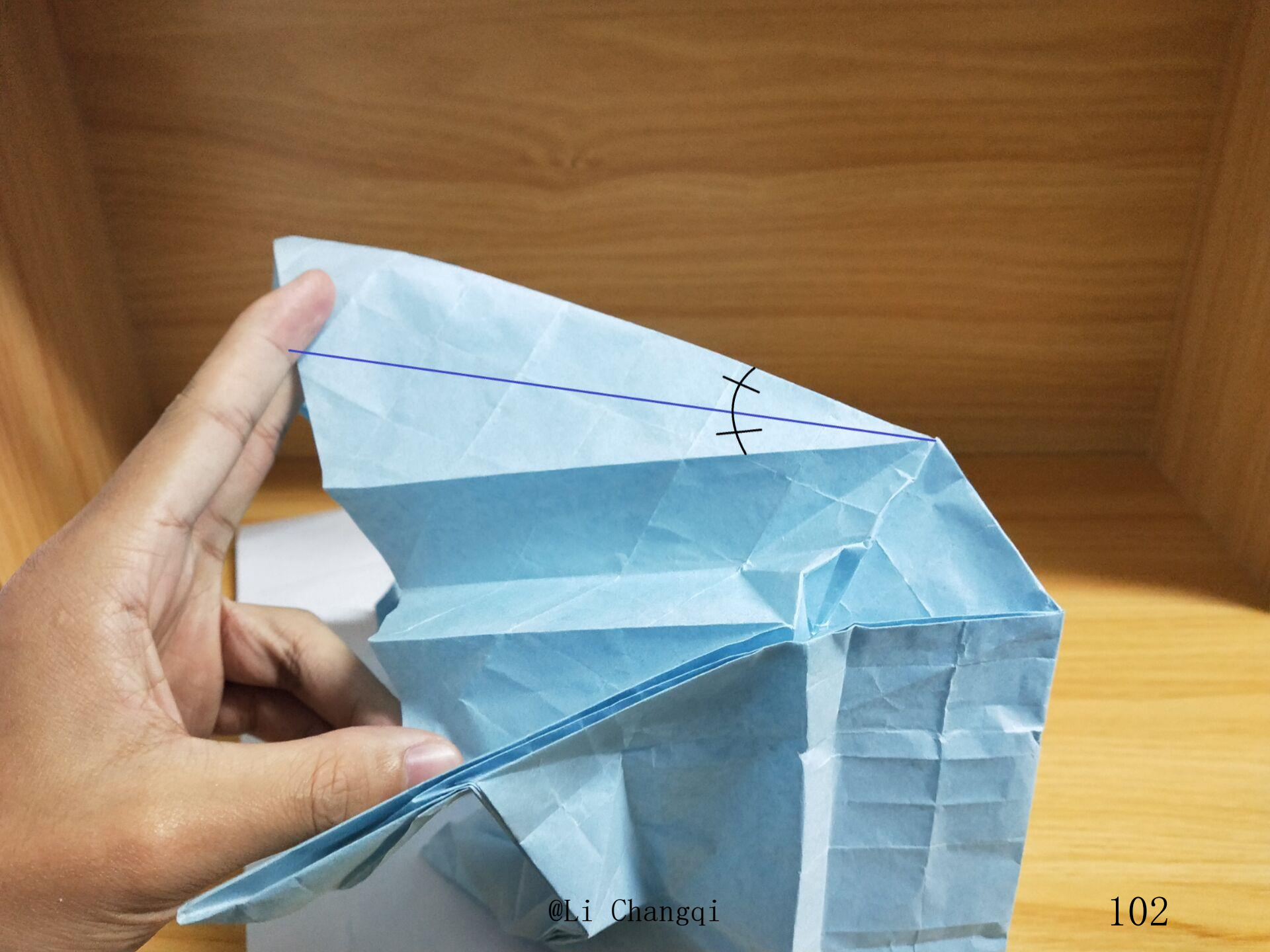


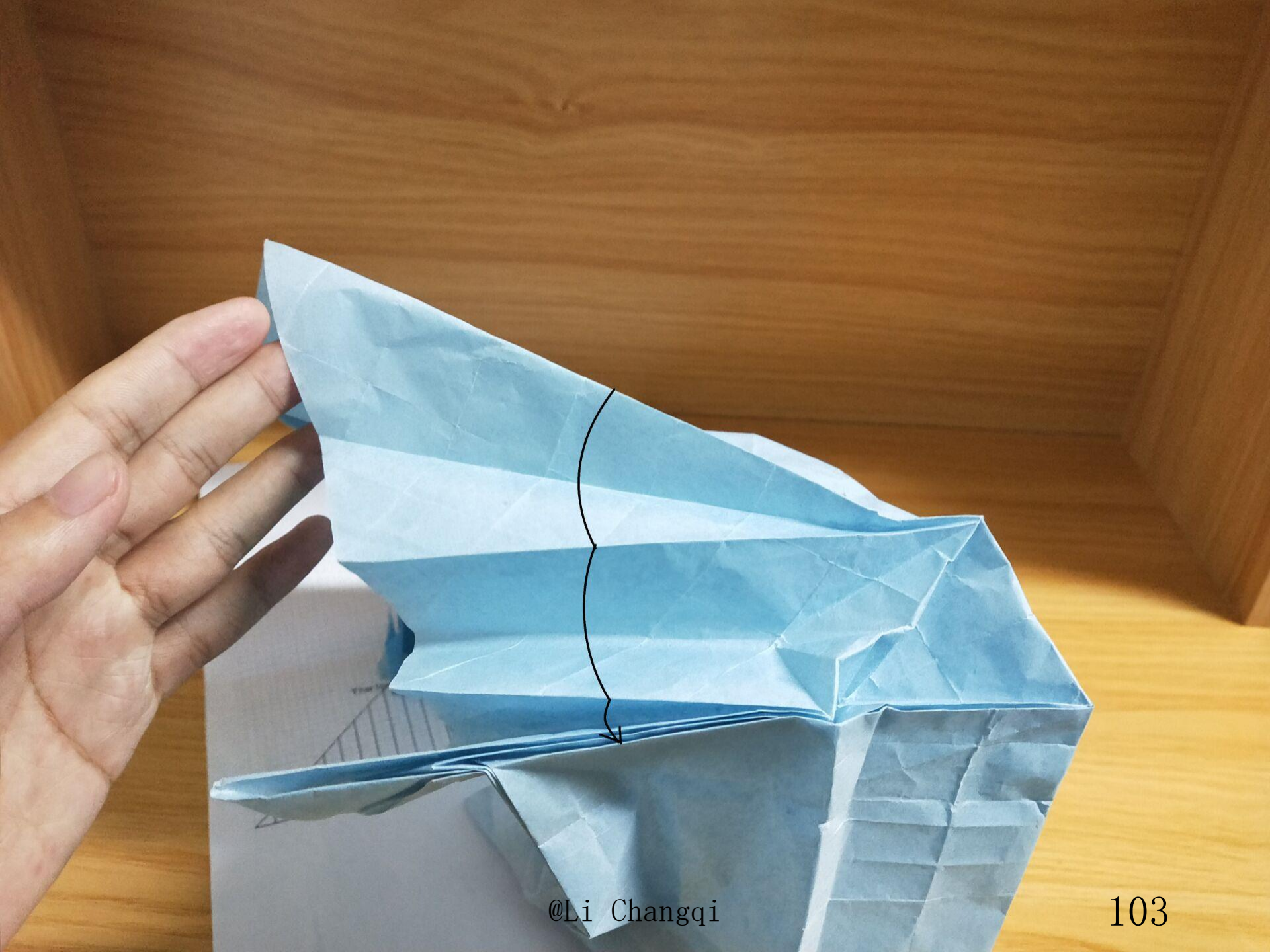






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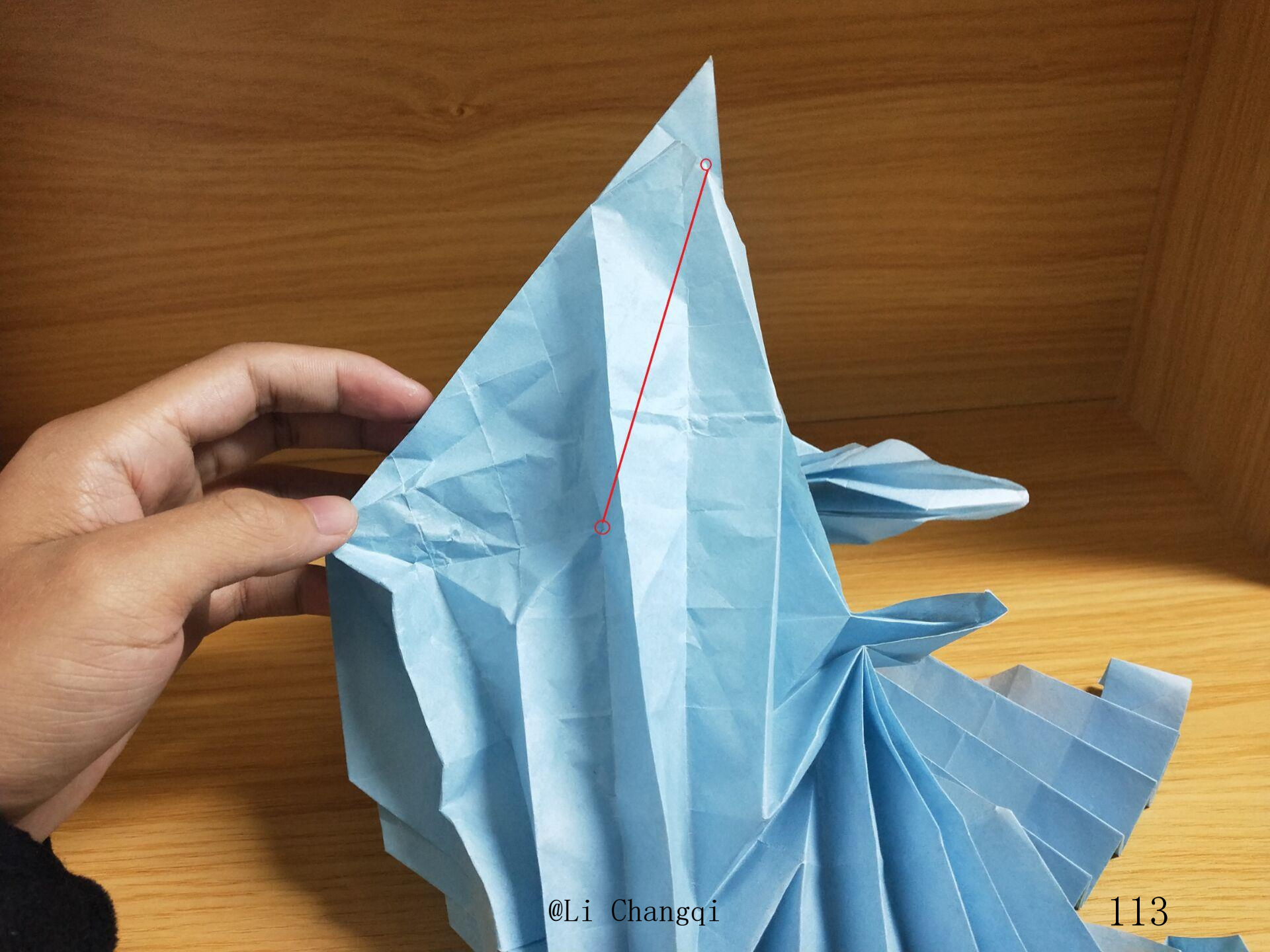



在两个格点之间，靠近上面的点
（这里粗略取线）

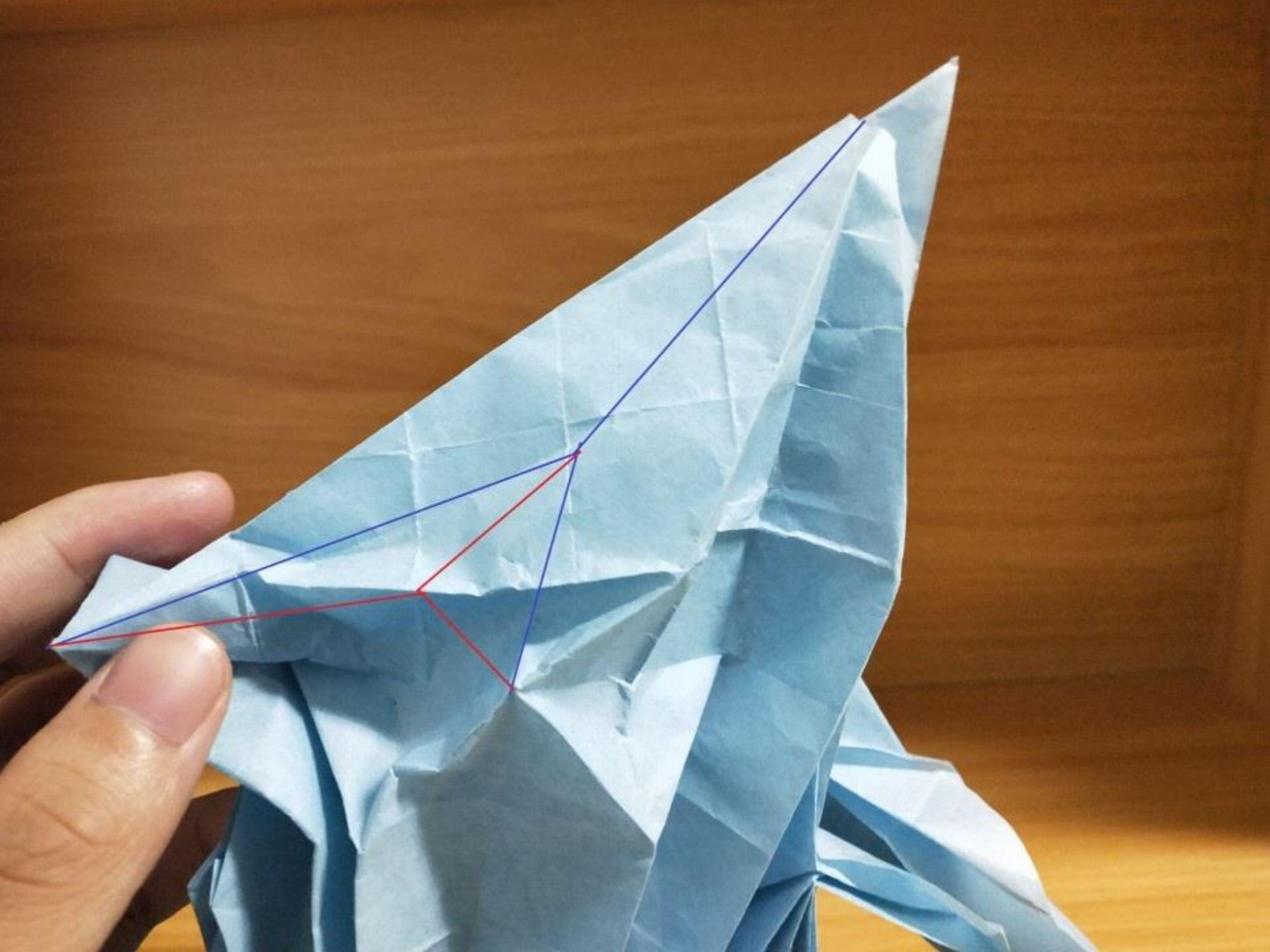


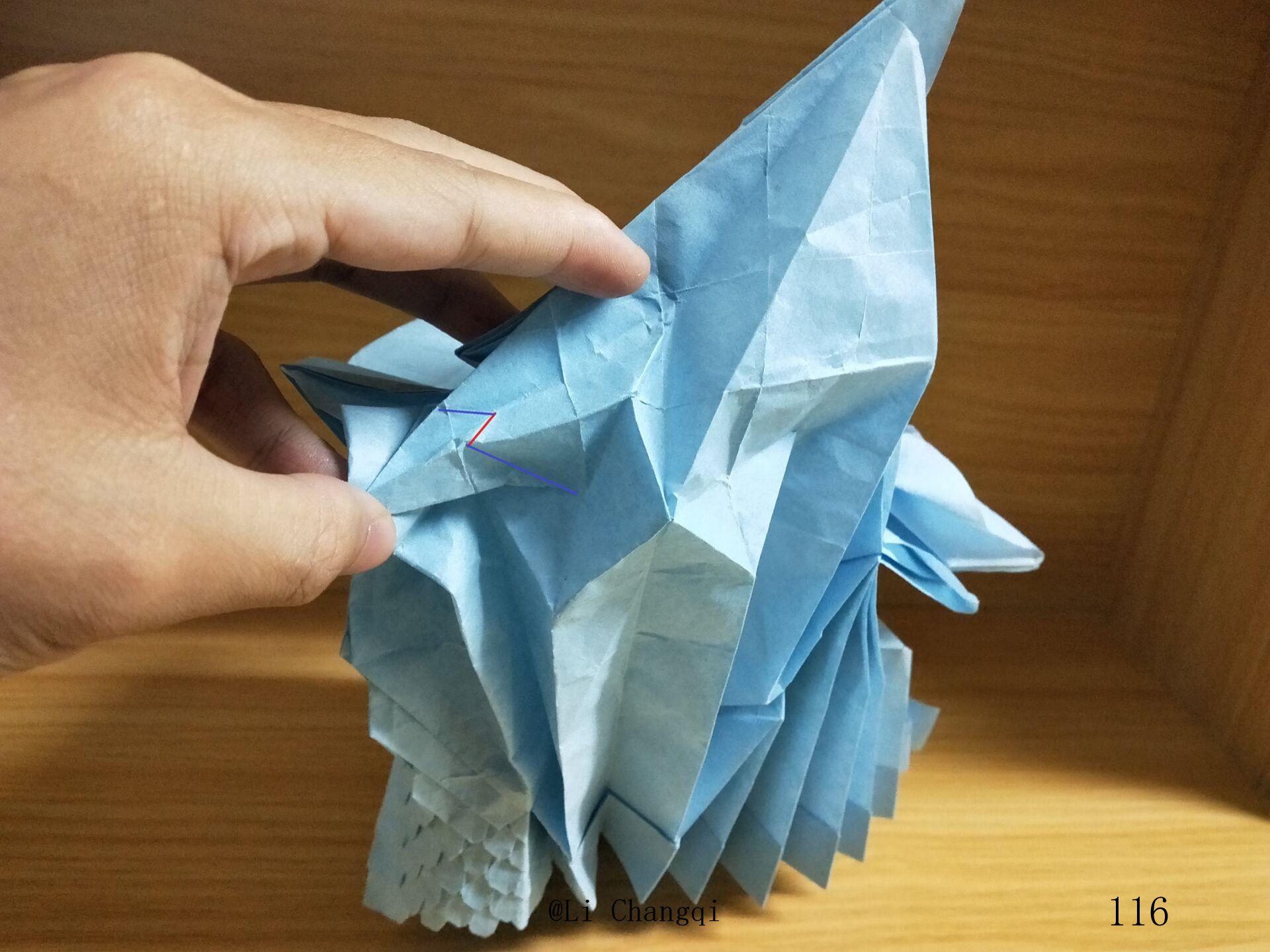



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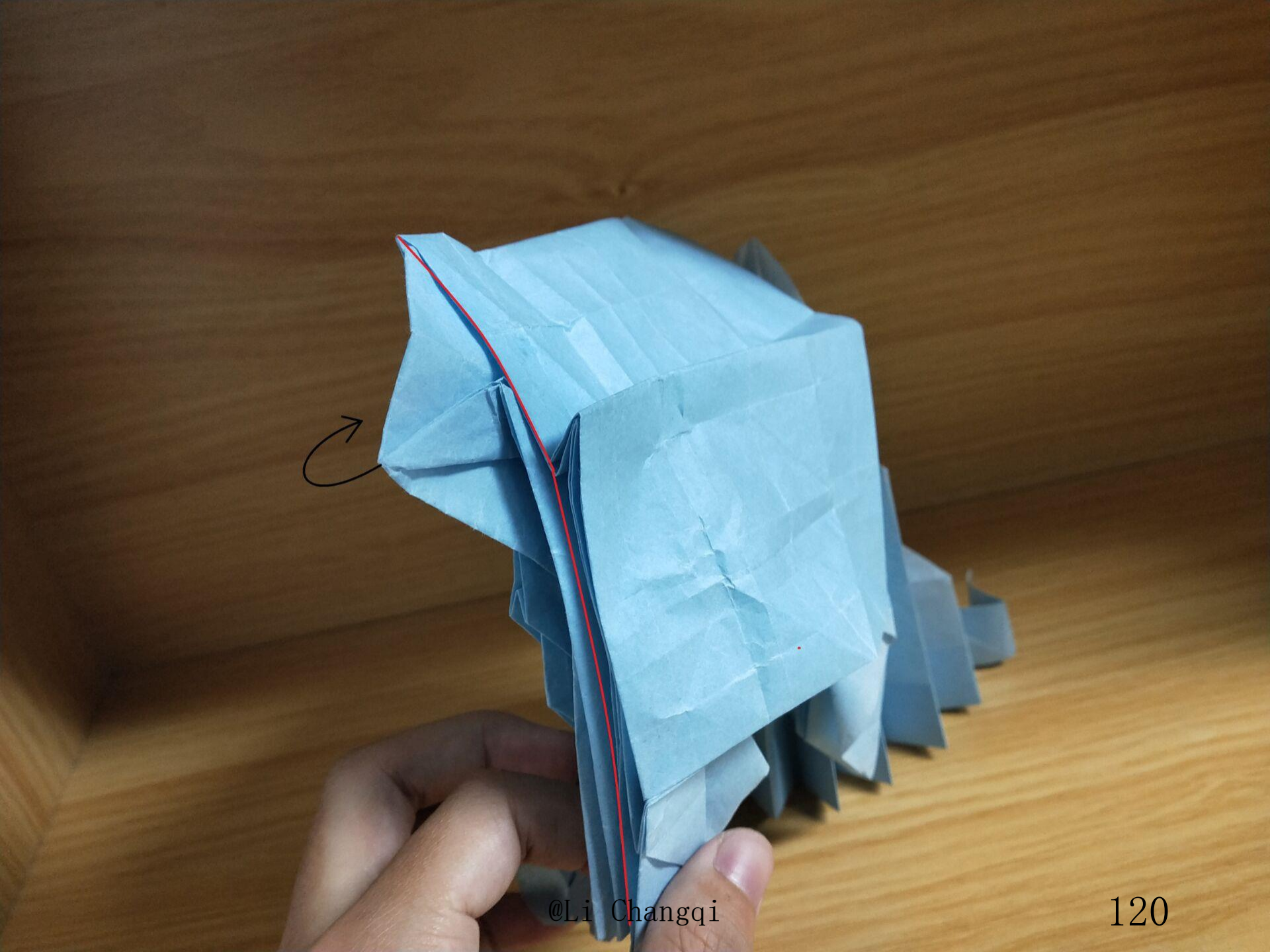


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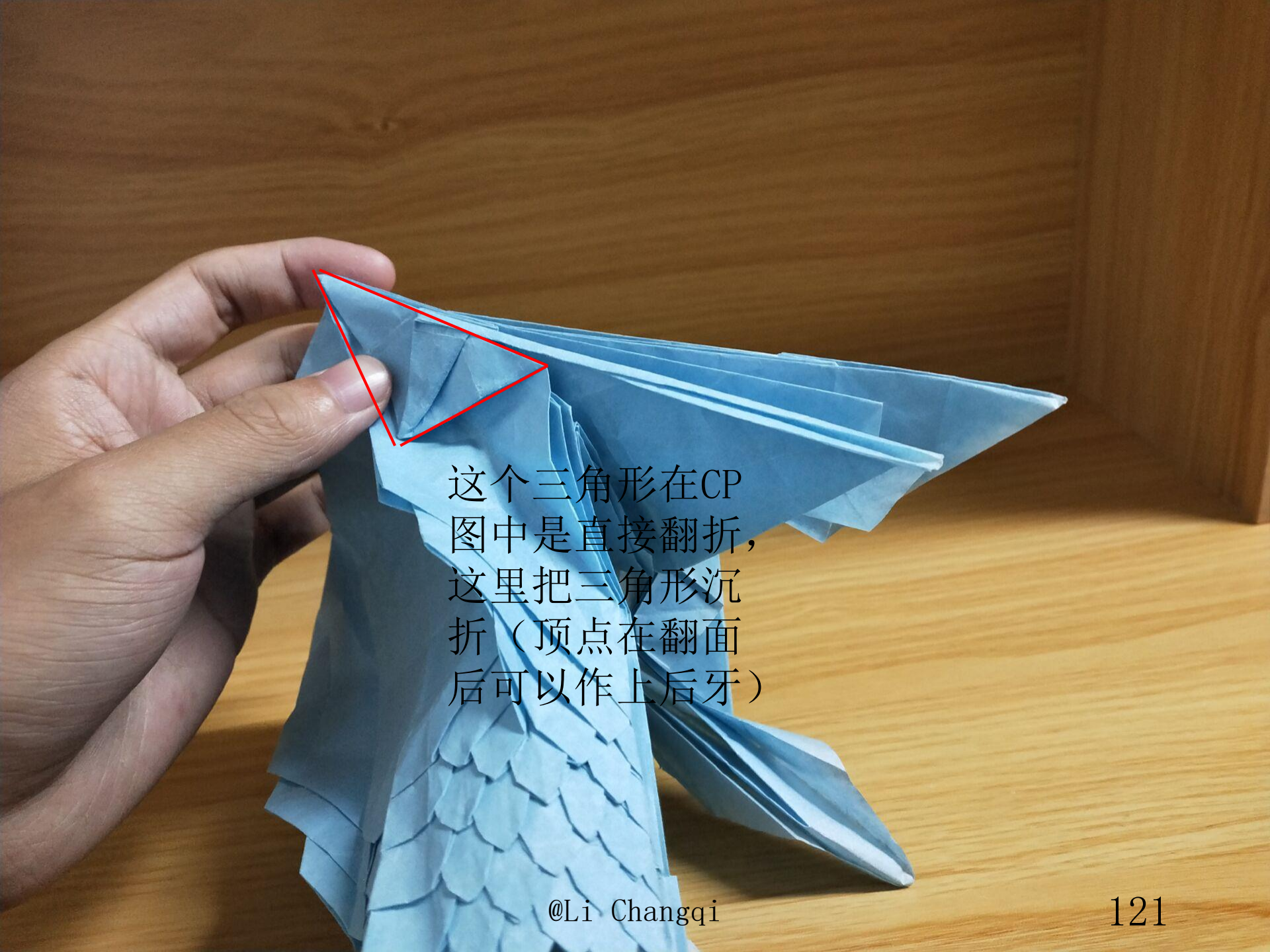








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这个三角形在CP
图中是直接翻折，
这里把三角形沉
折（顶点在翻面
后可以作上后牙）



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取角平分线



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此侧重复





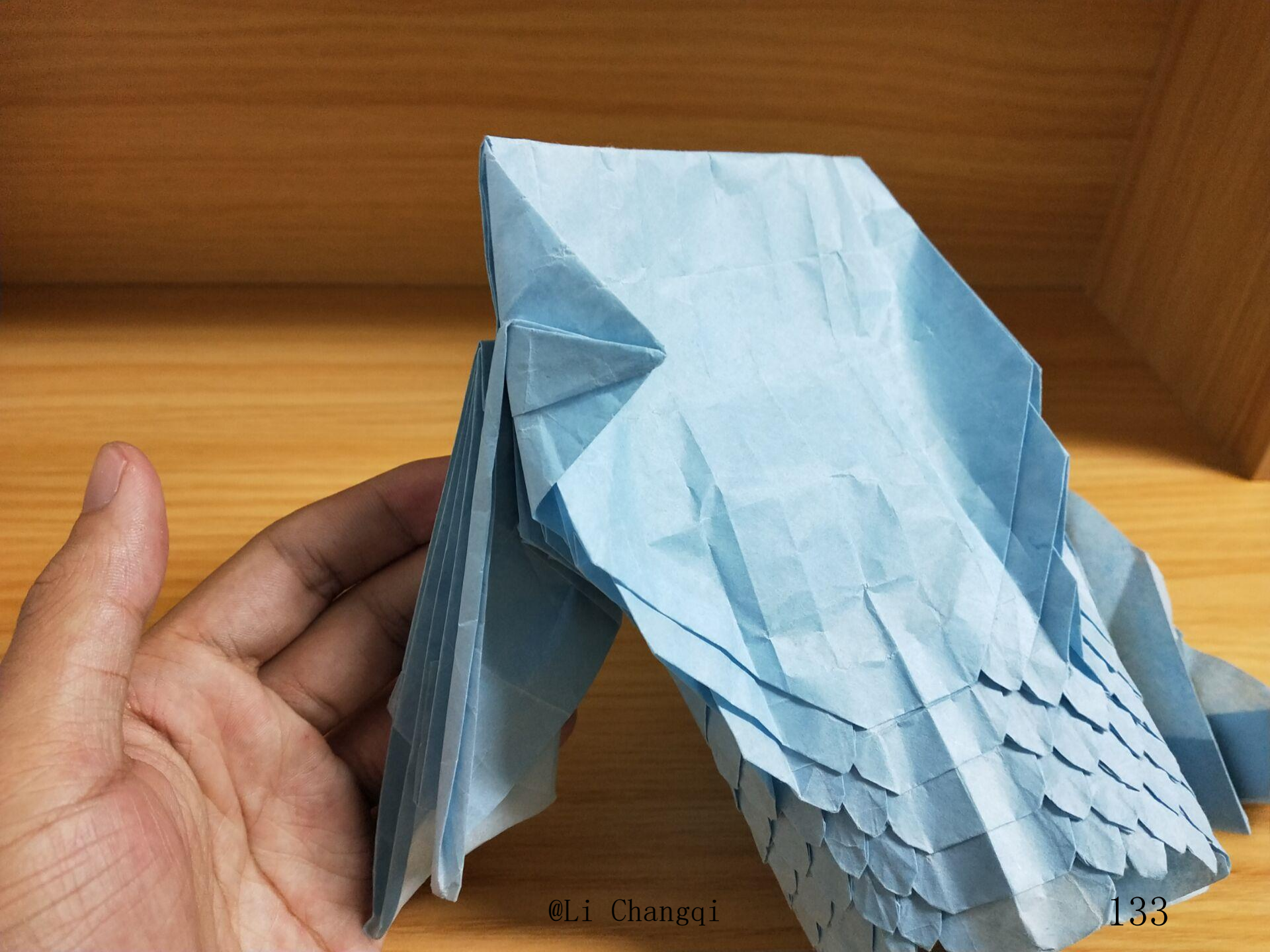





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@Li Changqi




@Li Changqi





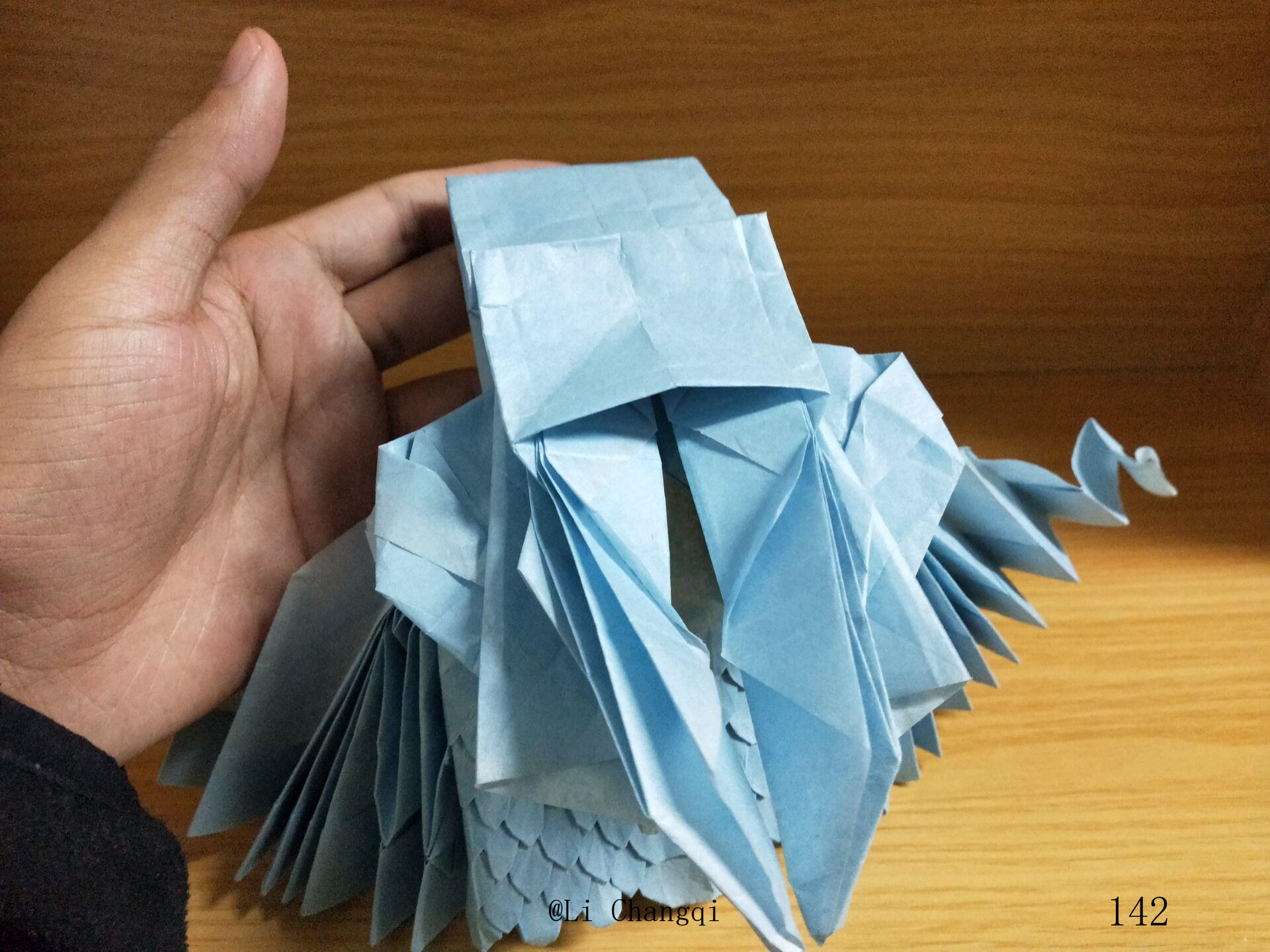
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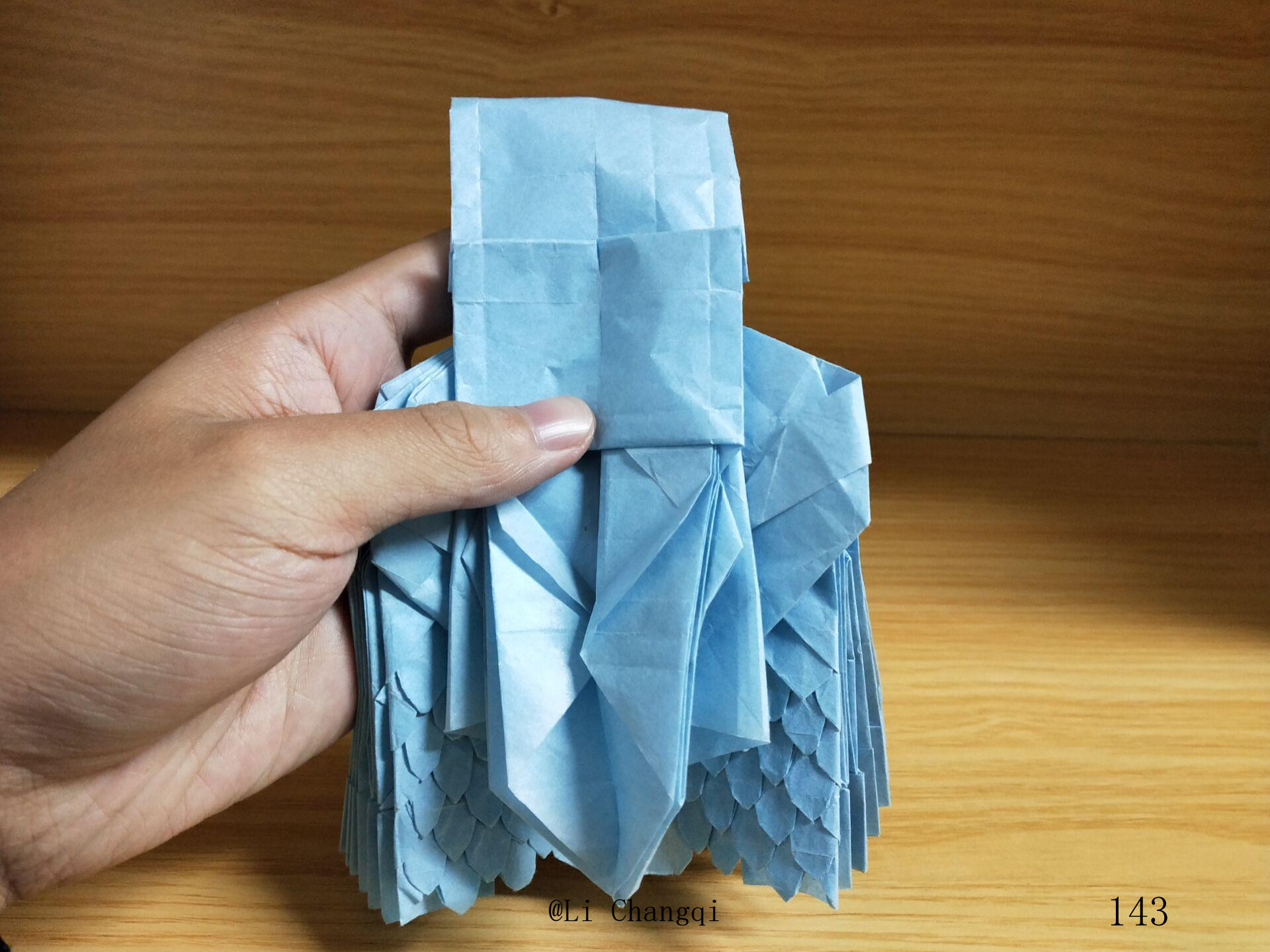








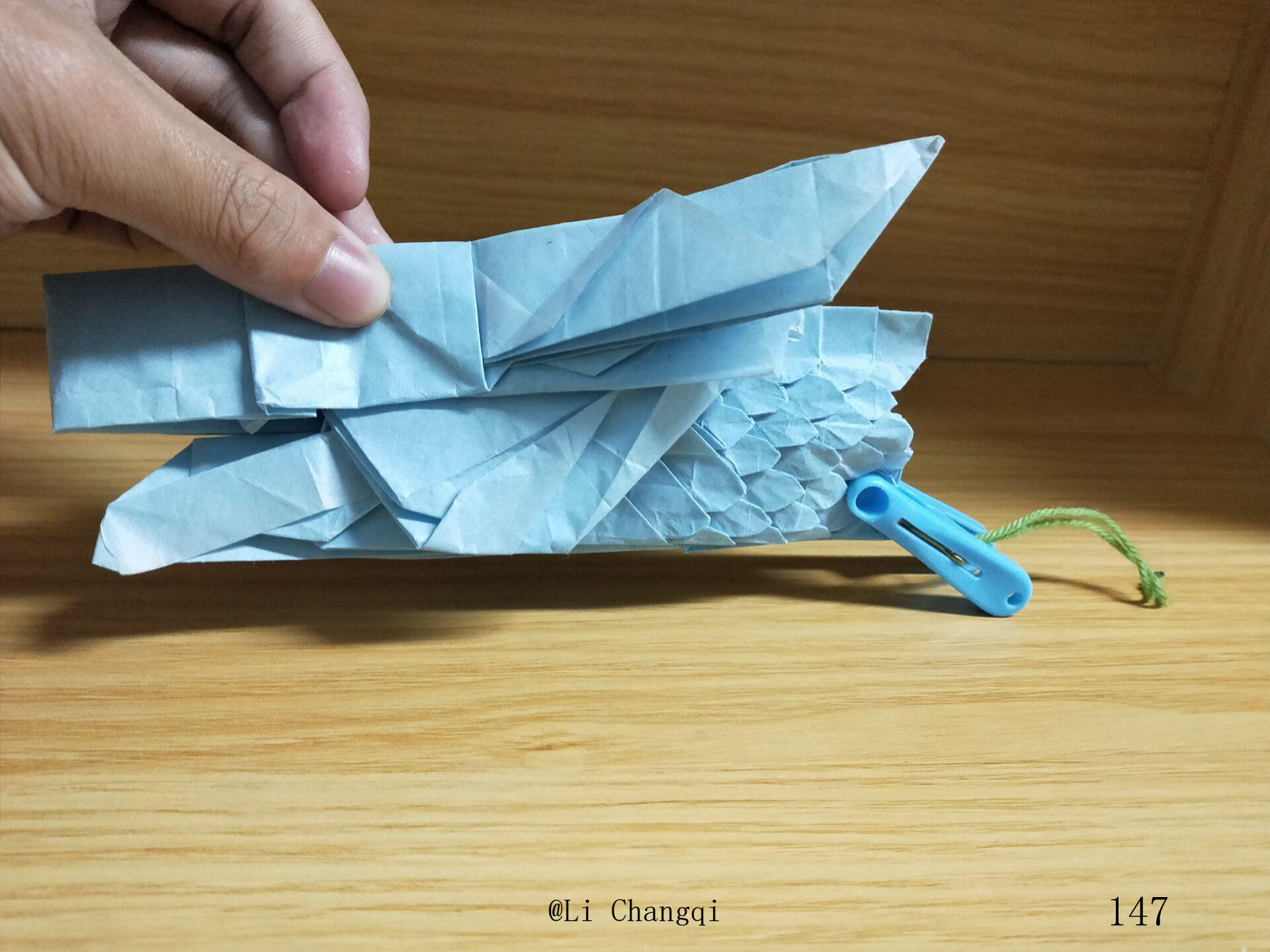


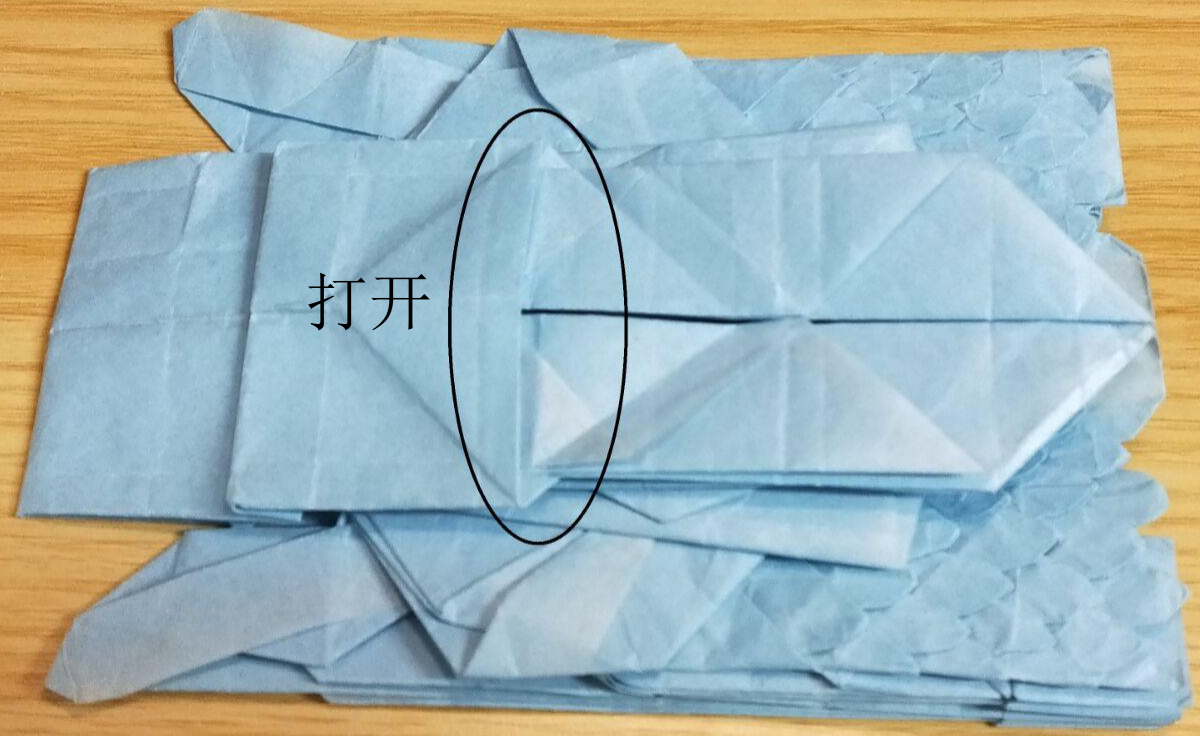



切换视角

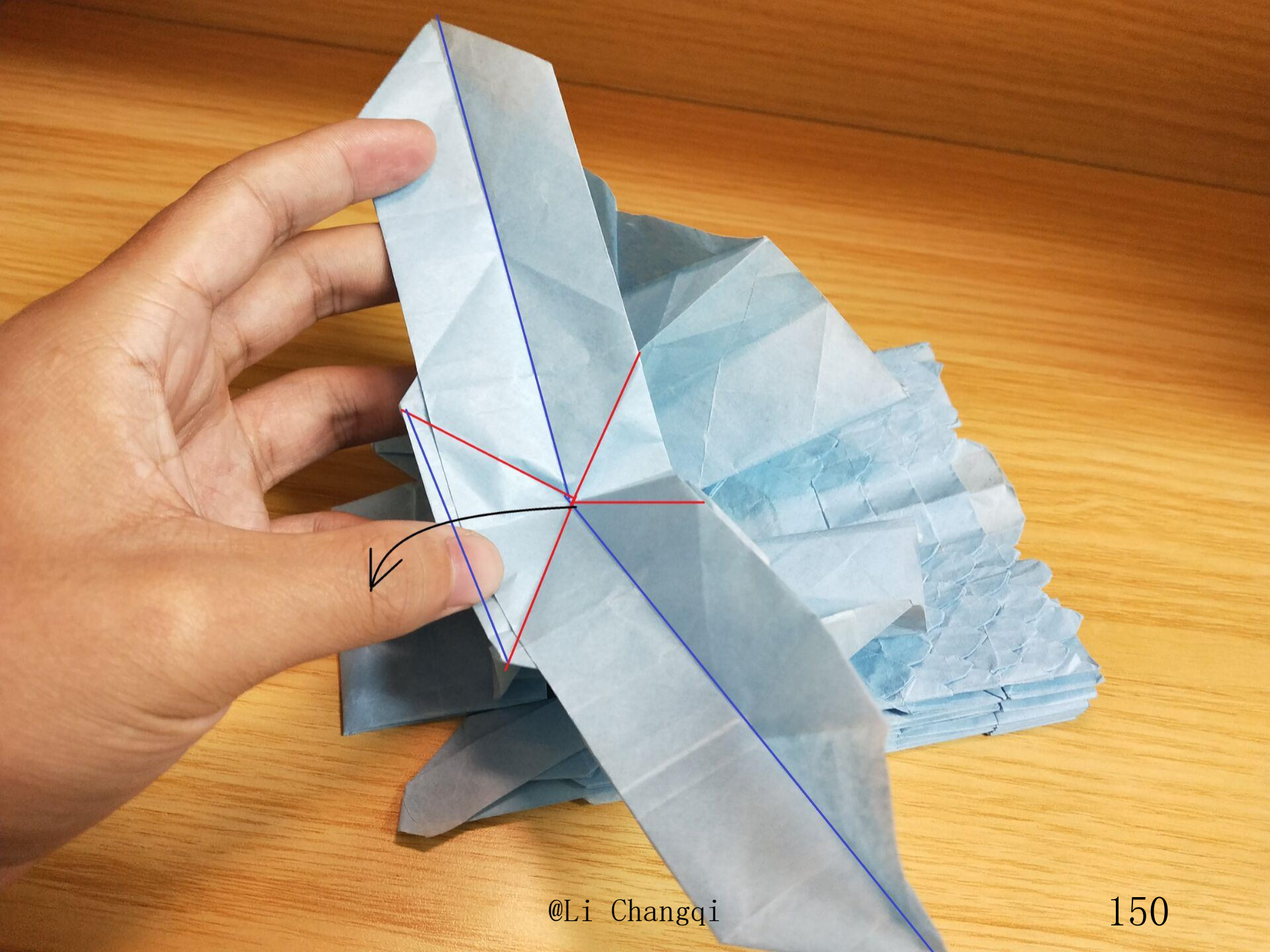






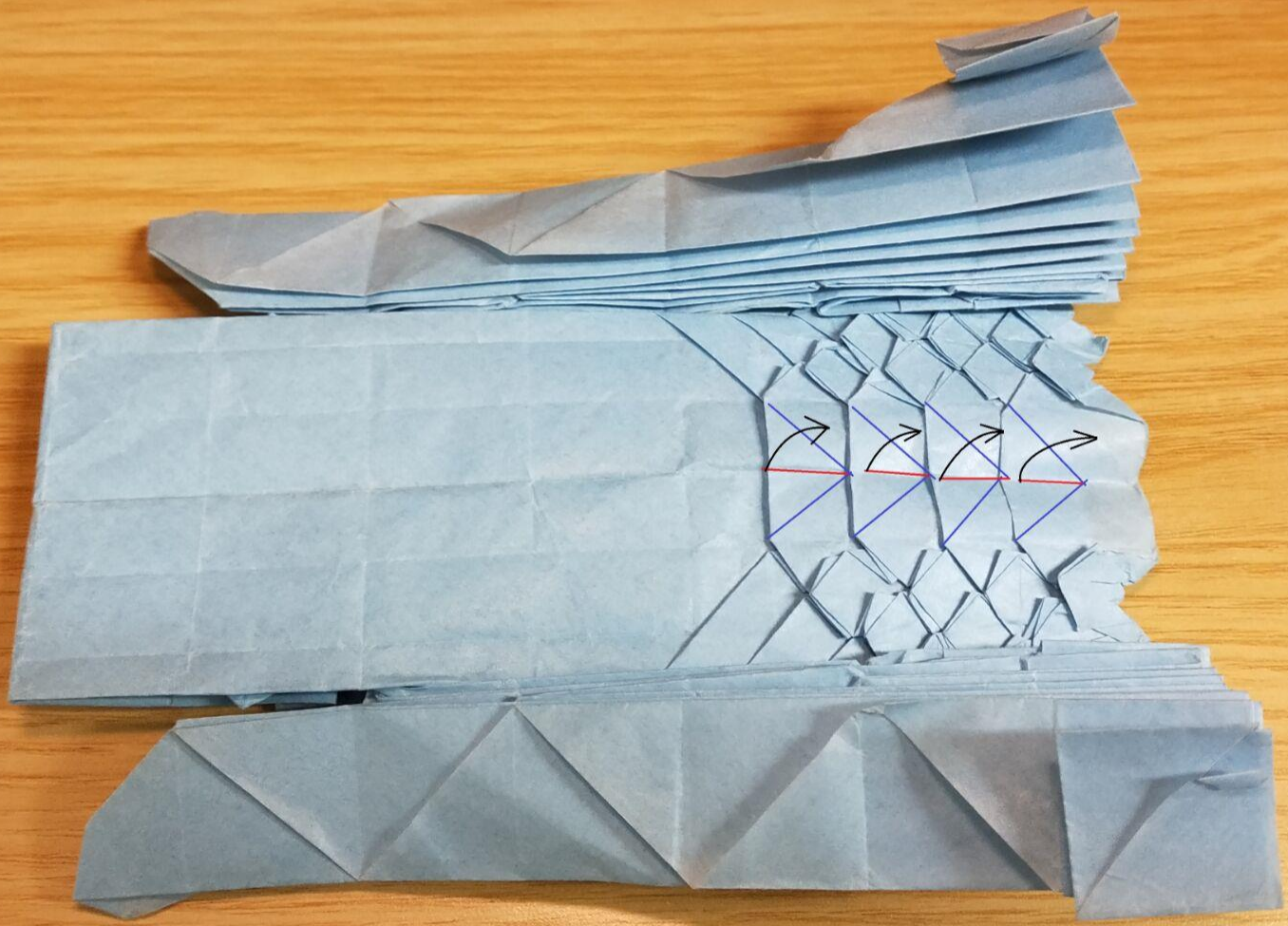

打开





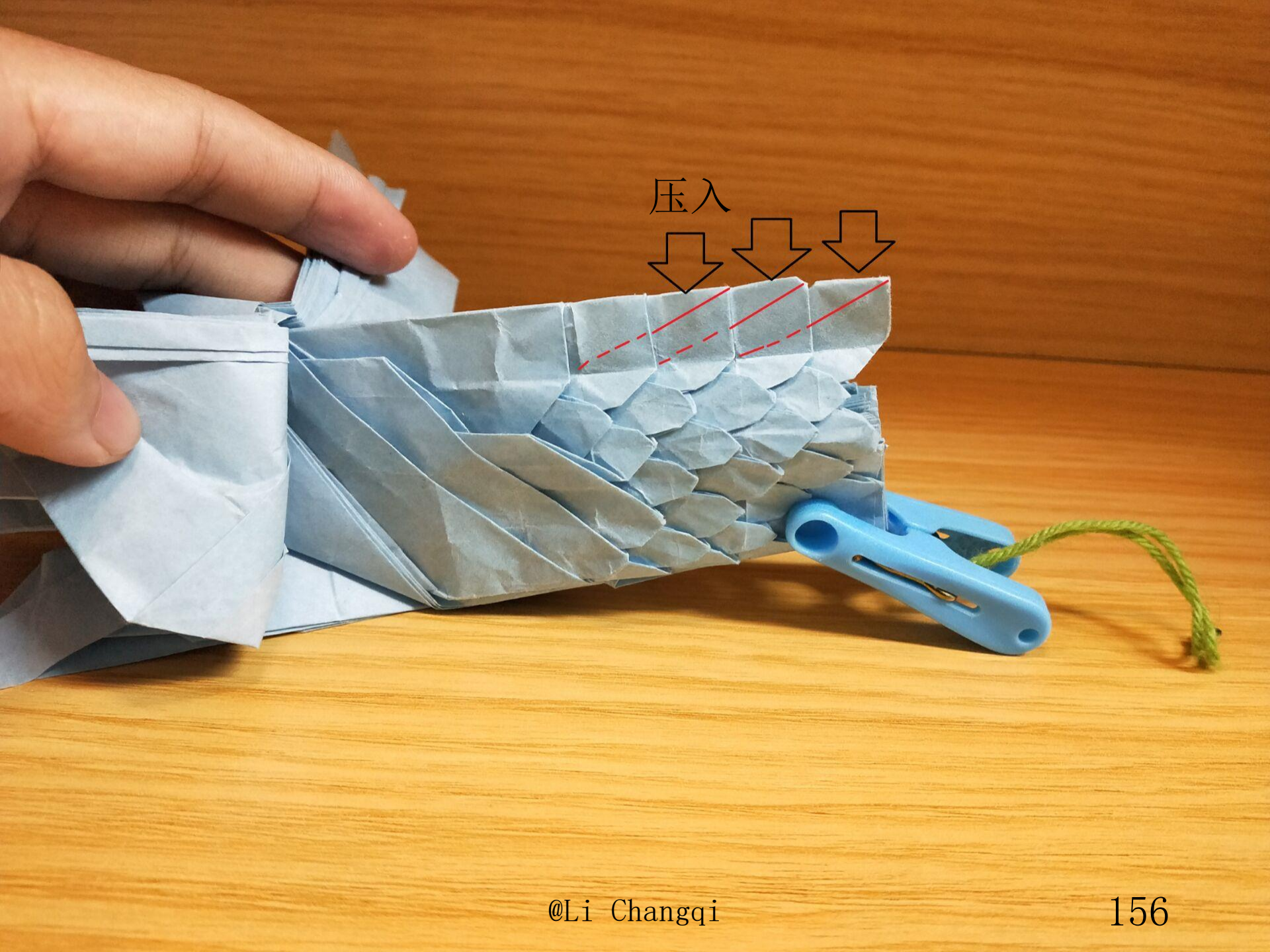






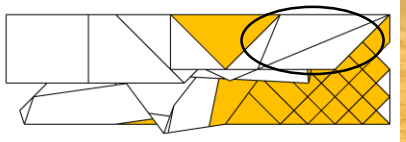





压入


这里出现了纸层穿插，但没有太大影响

这个位置有一点不一样，
在P188之后就改过来了

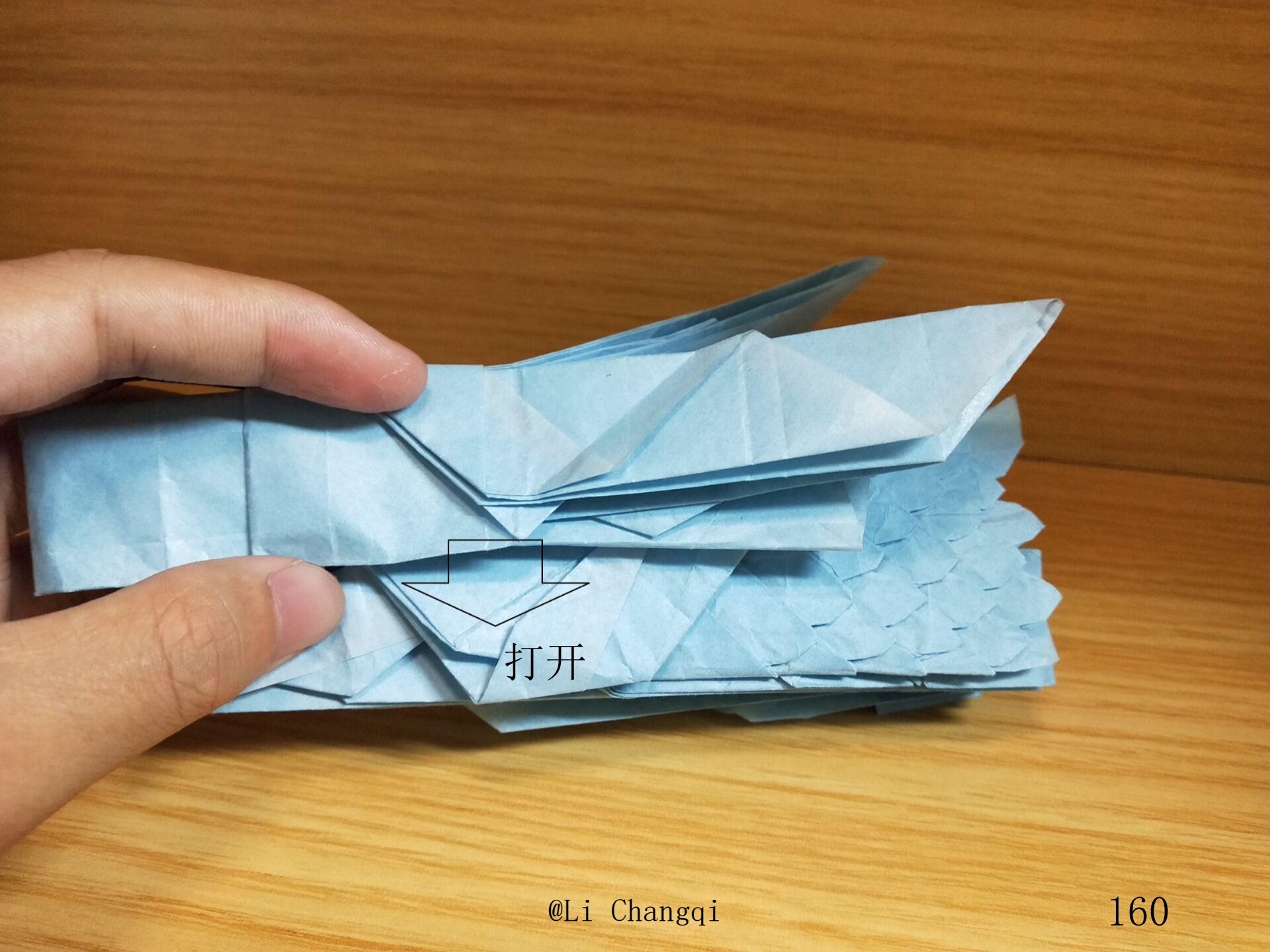


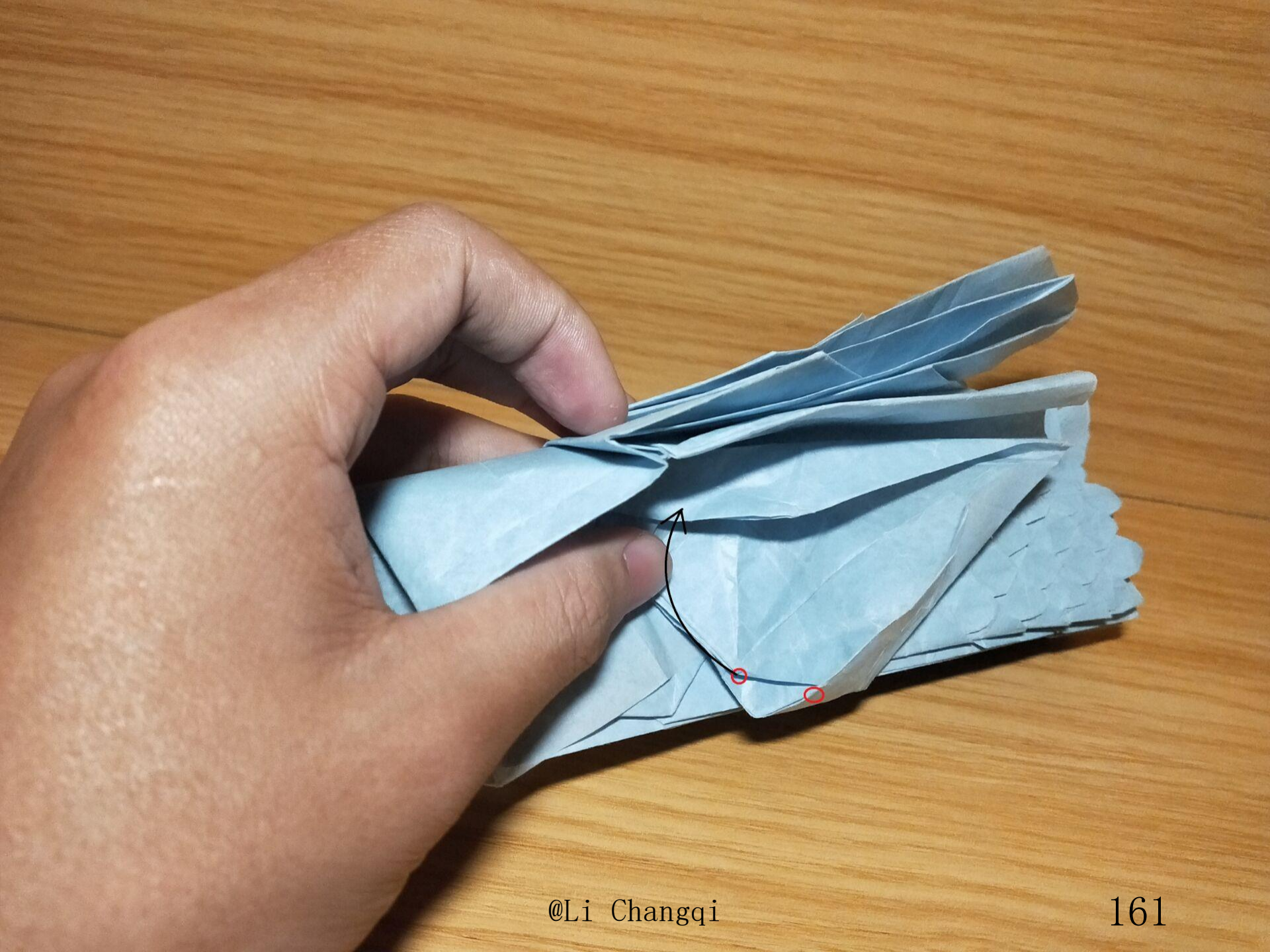
CP图聚合的基本型完成



鬃毛

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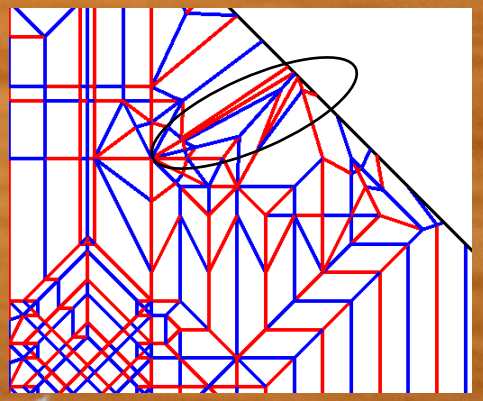

打开







展平这里的褶皱





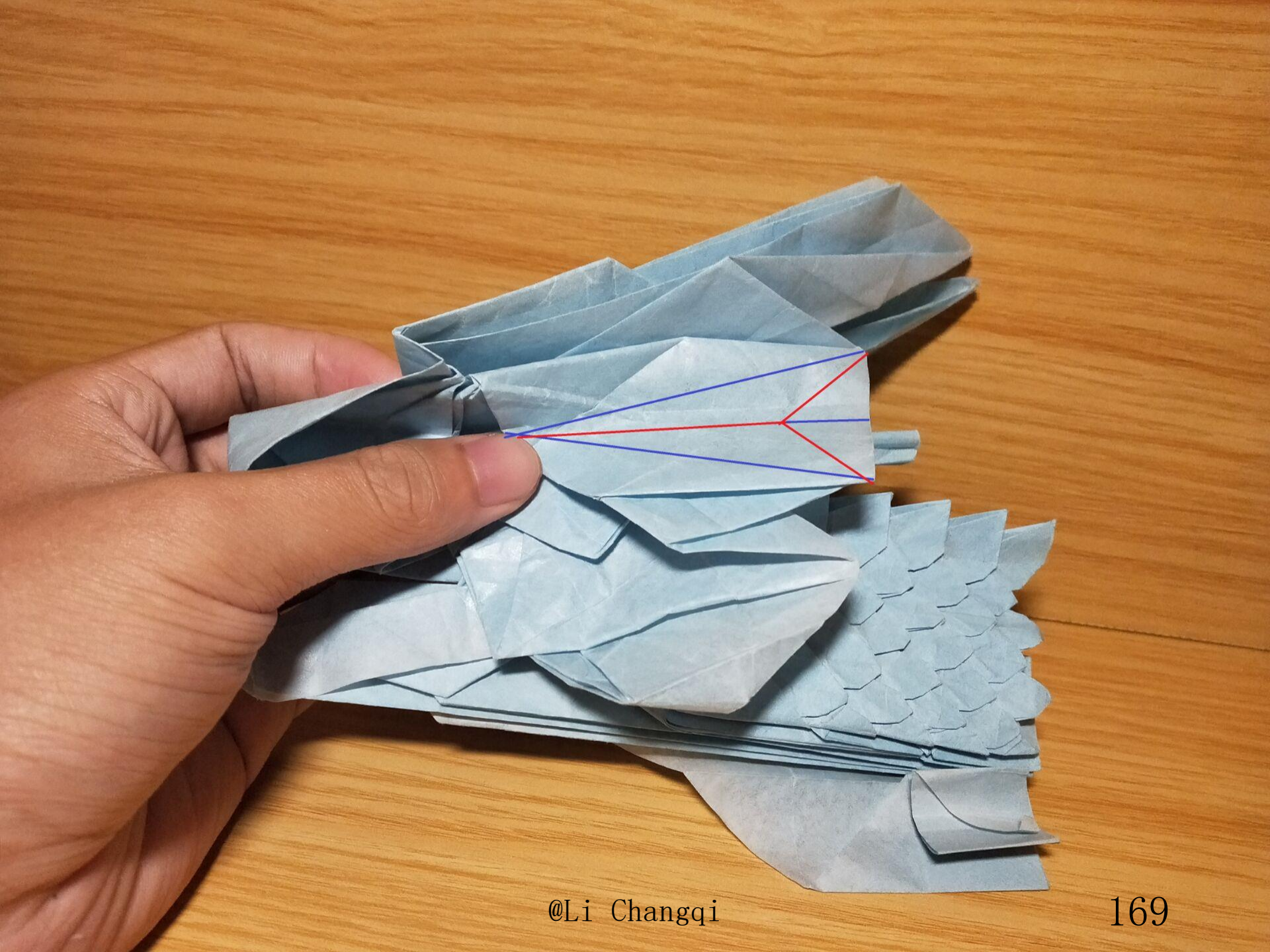



拉开这两处

注意灰色圆圈是格点

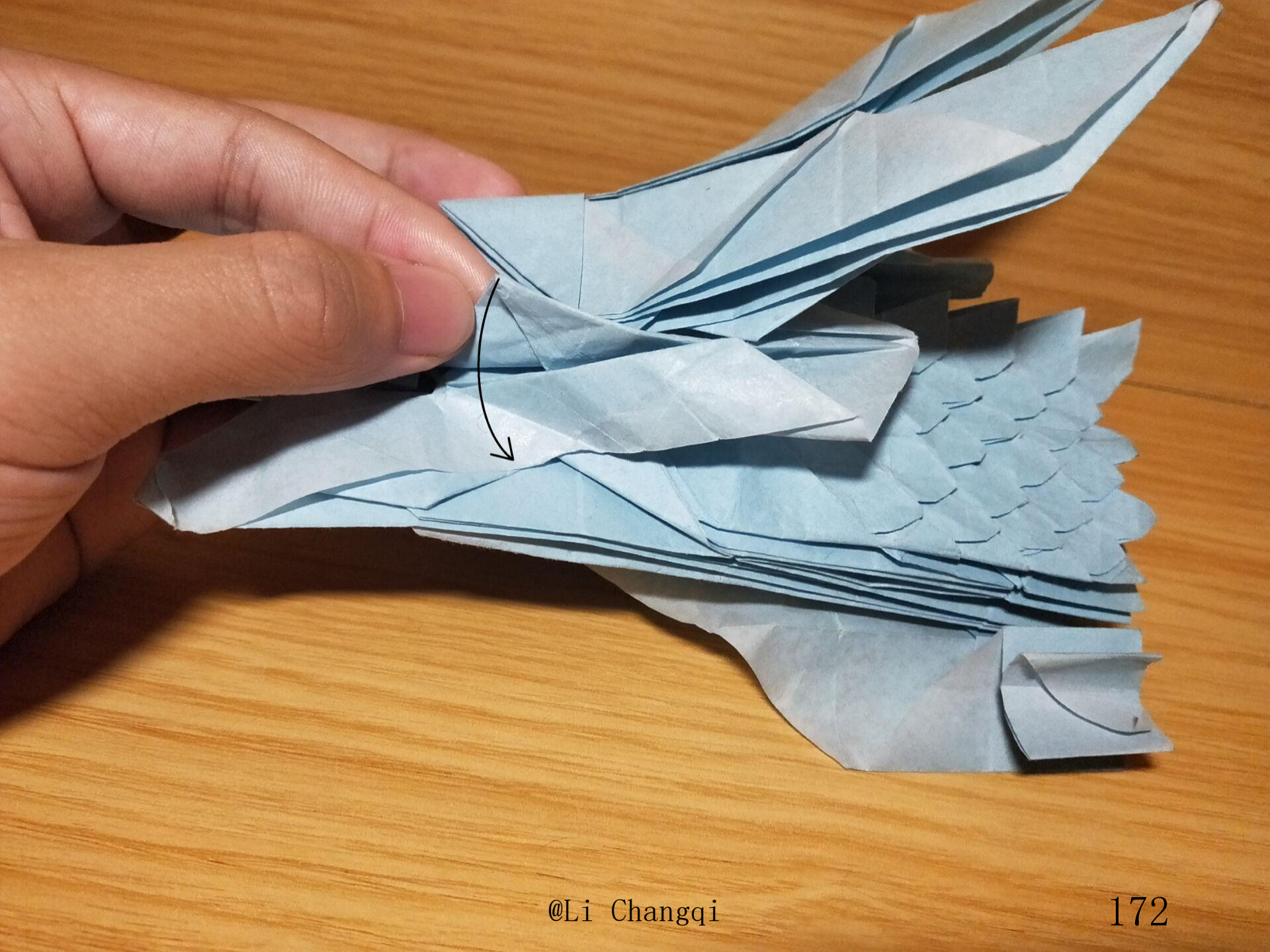


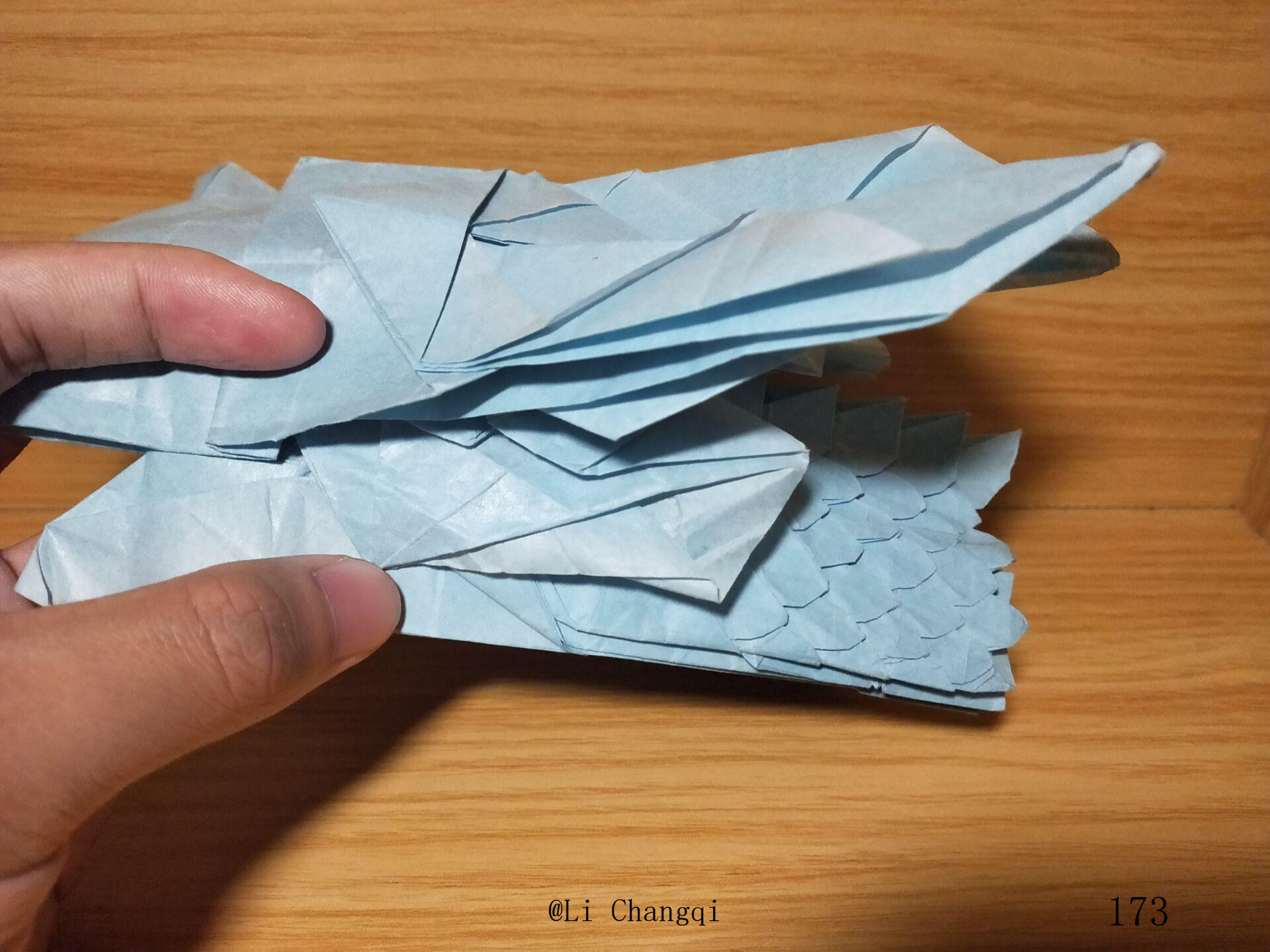


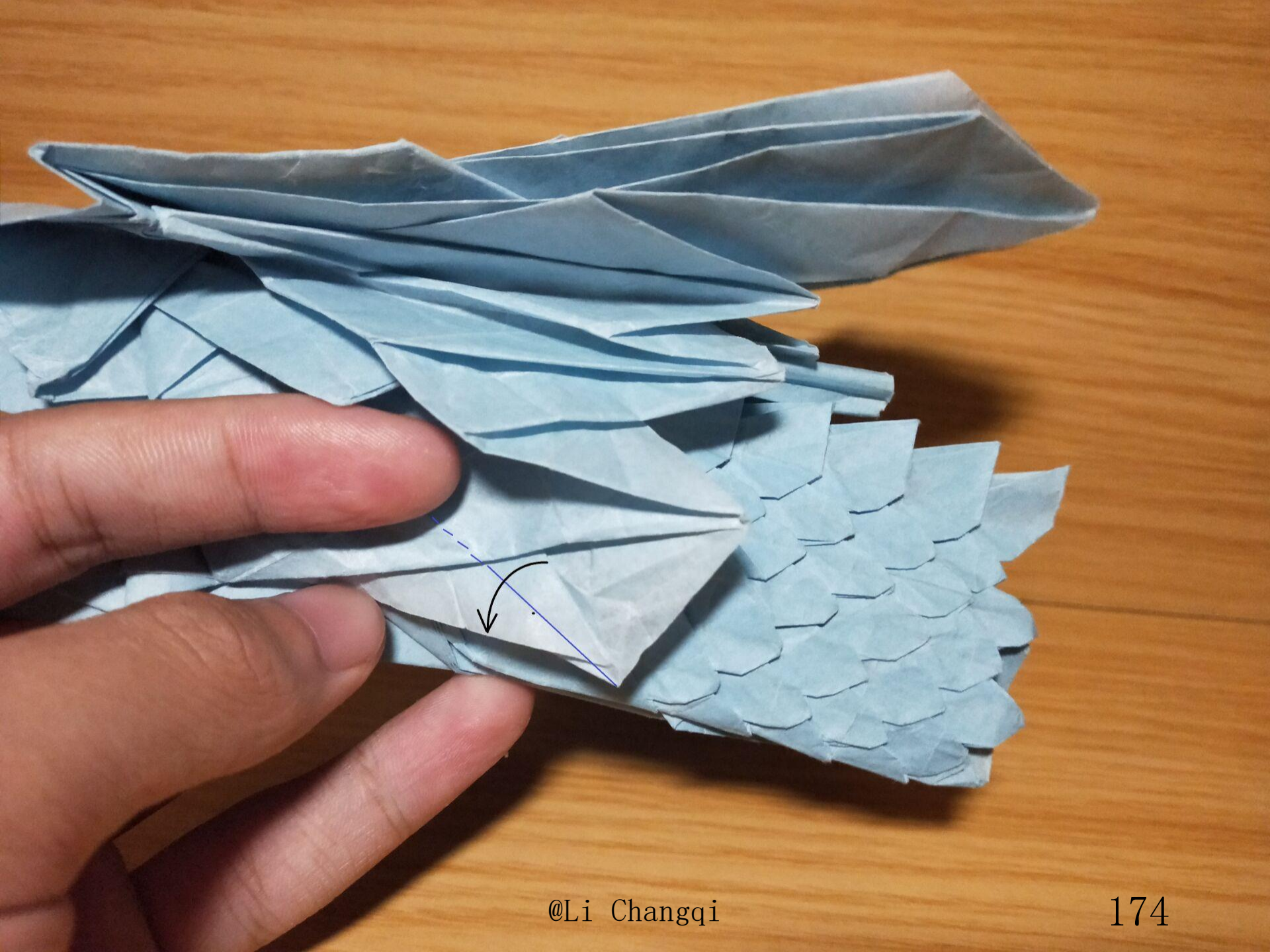


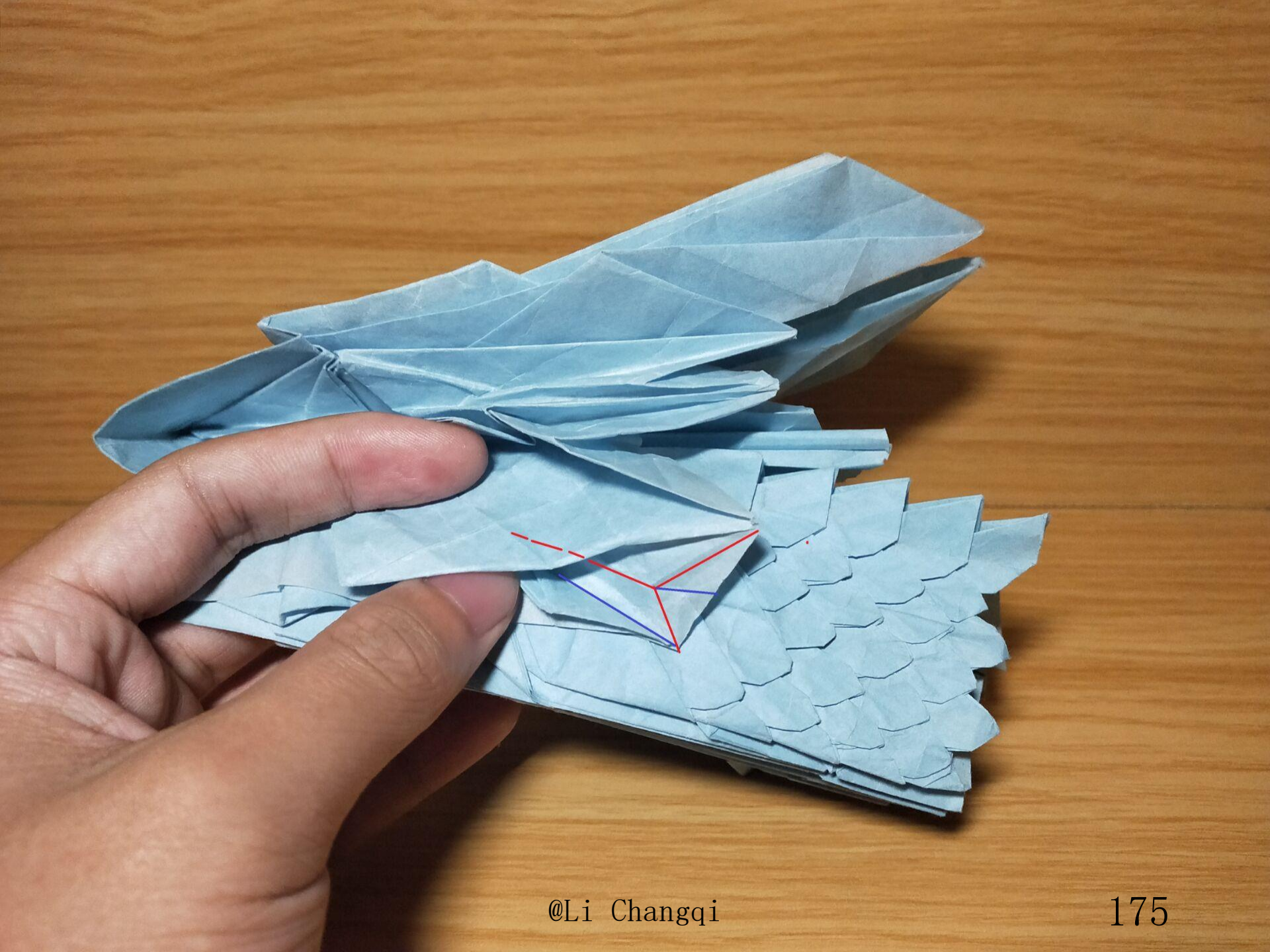




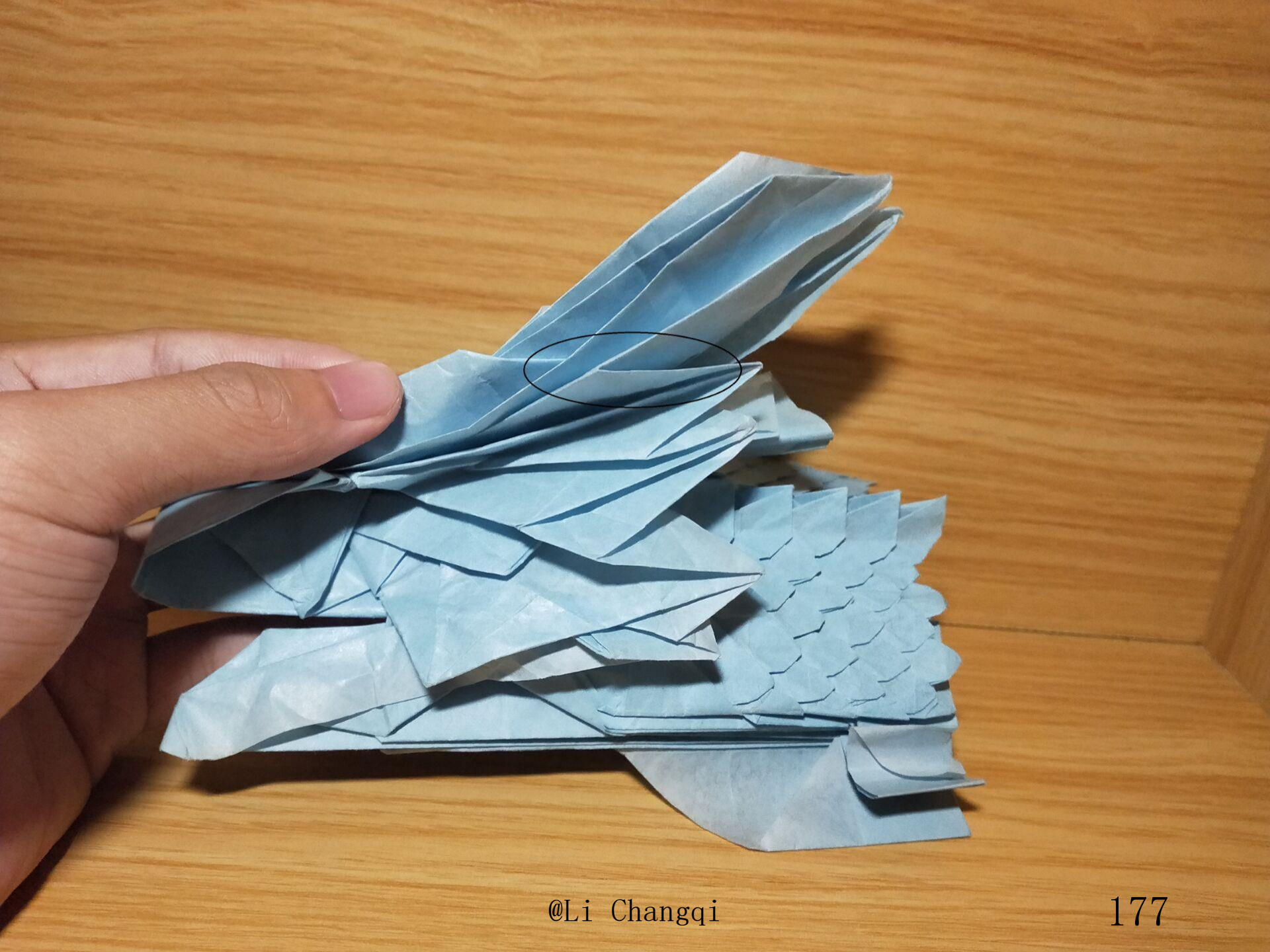


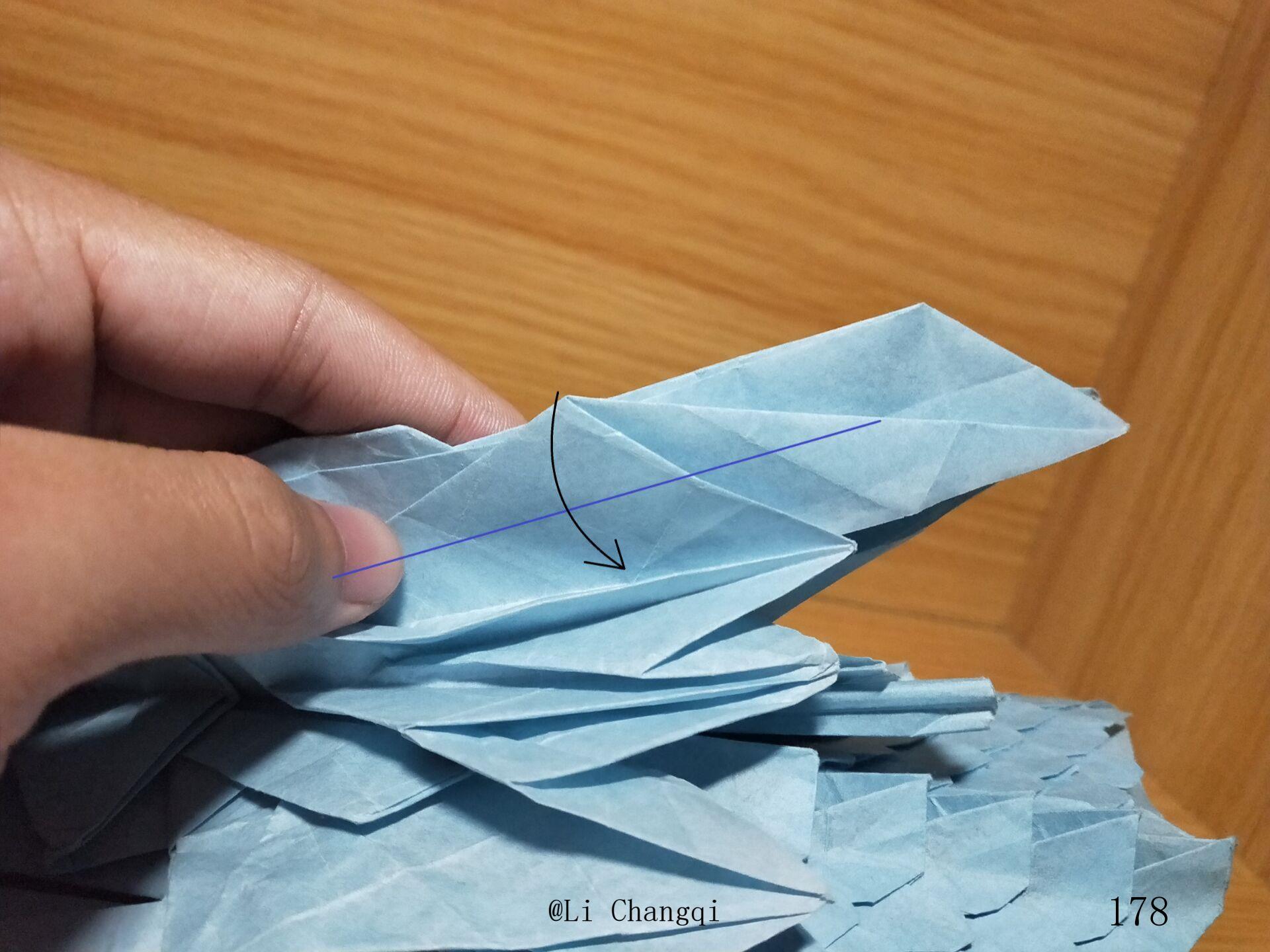


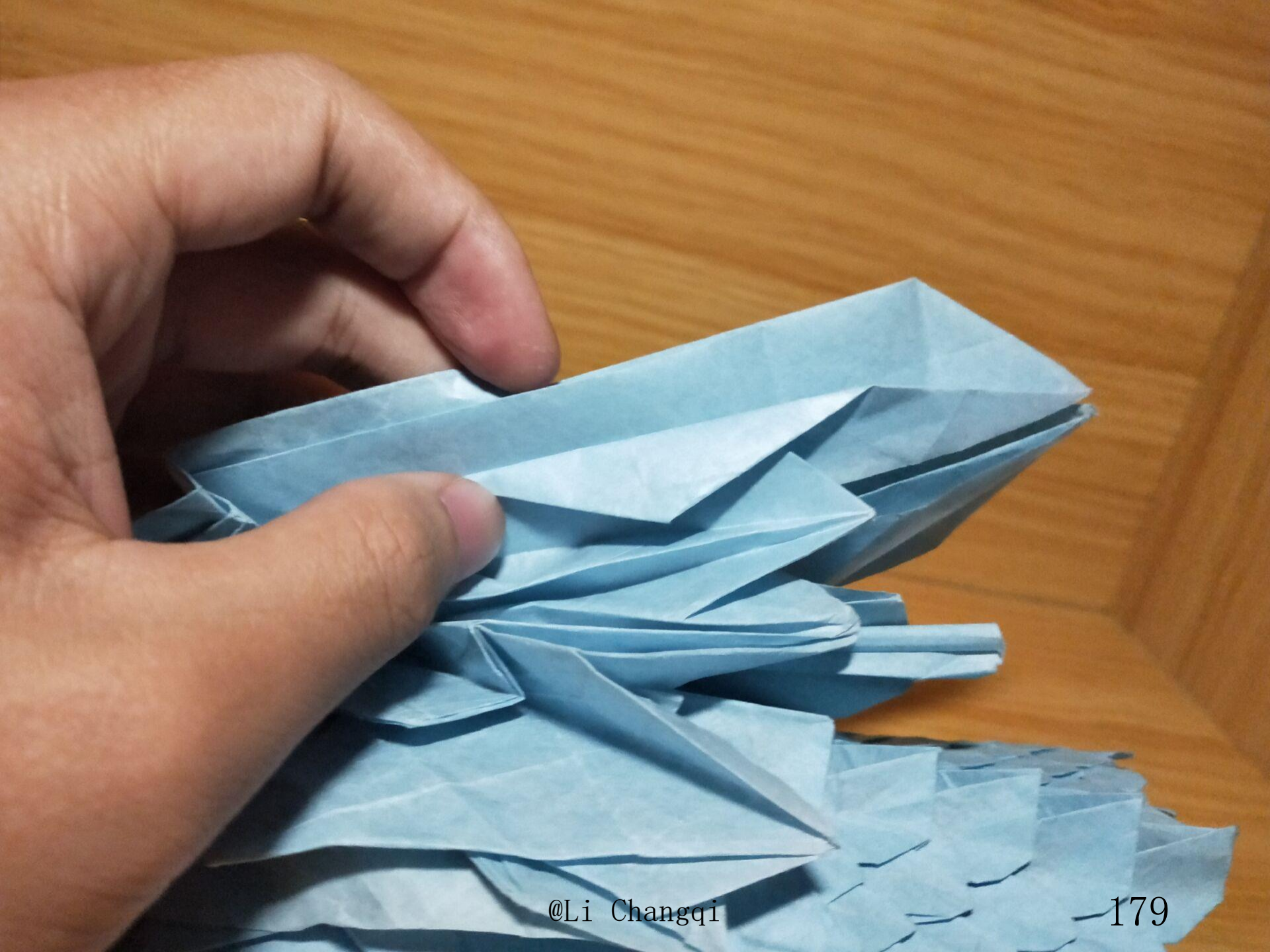












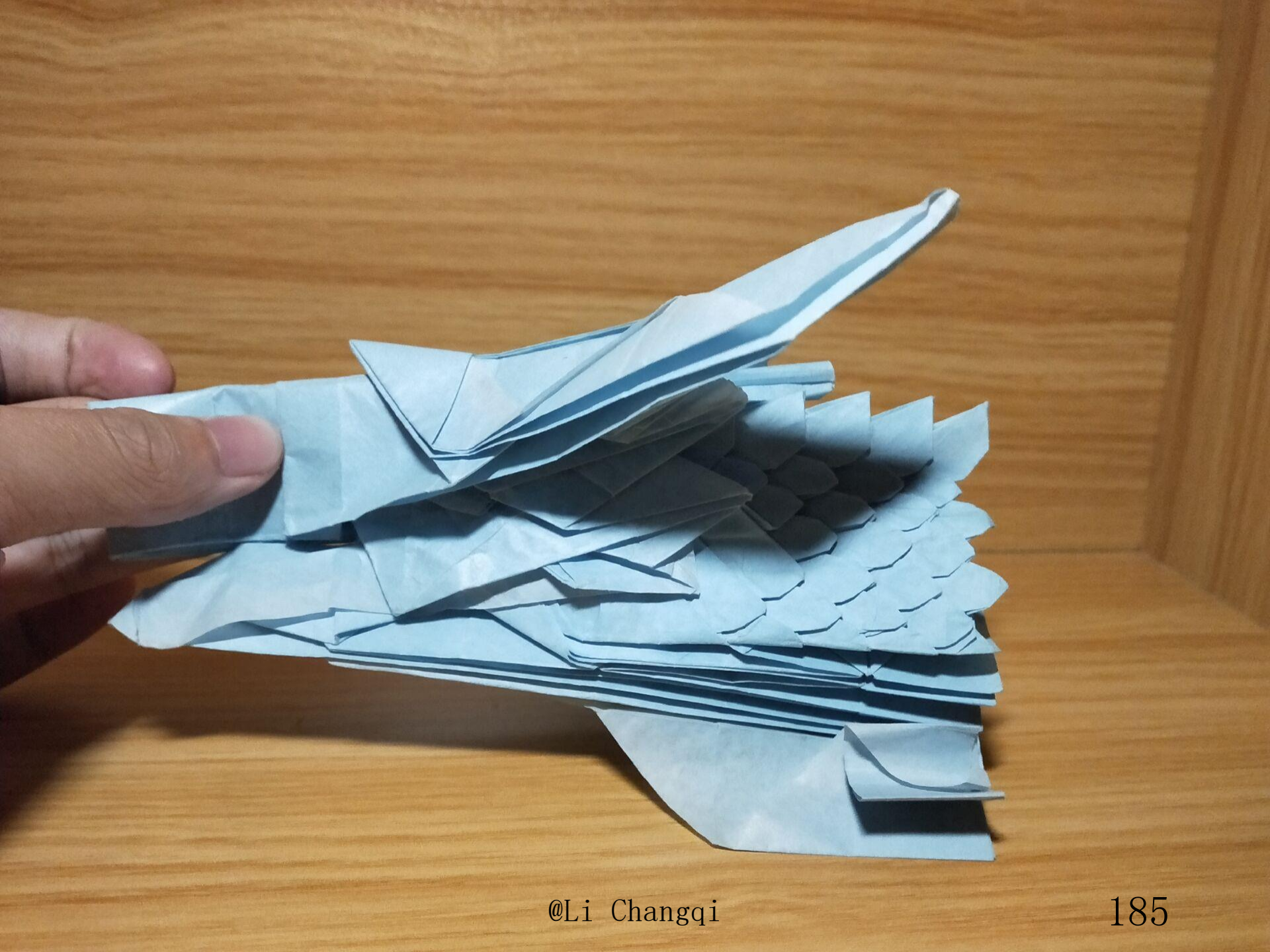

开沉（打开再压入）






开沉





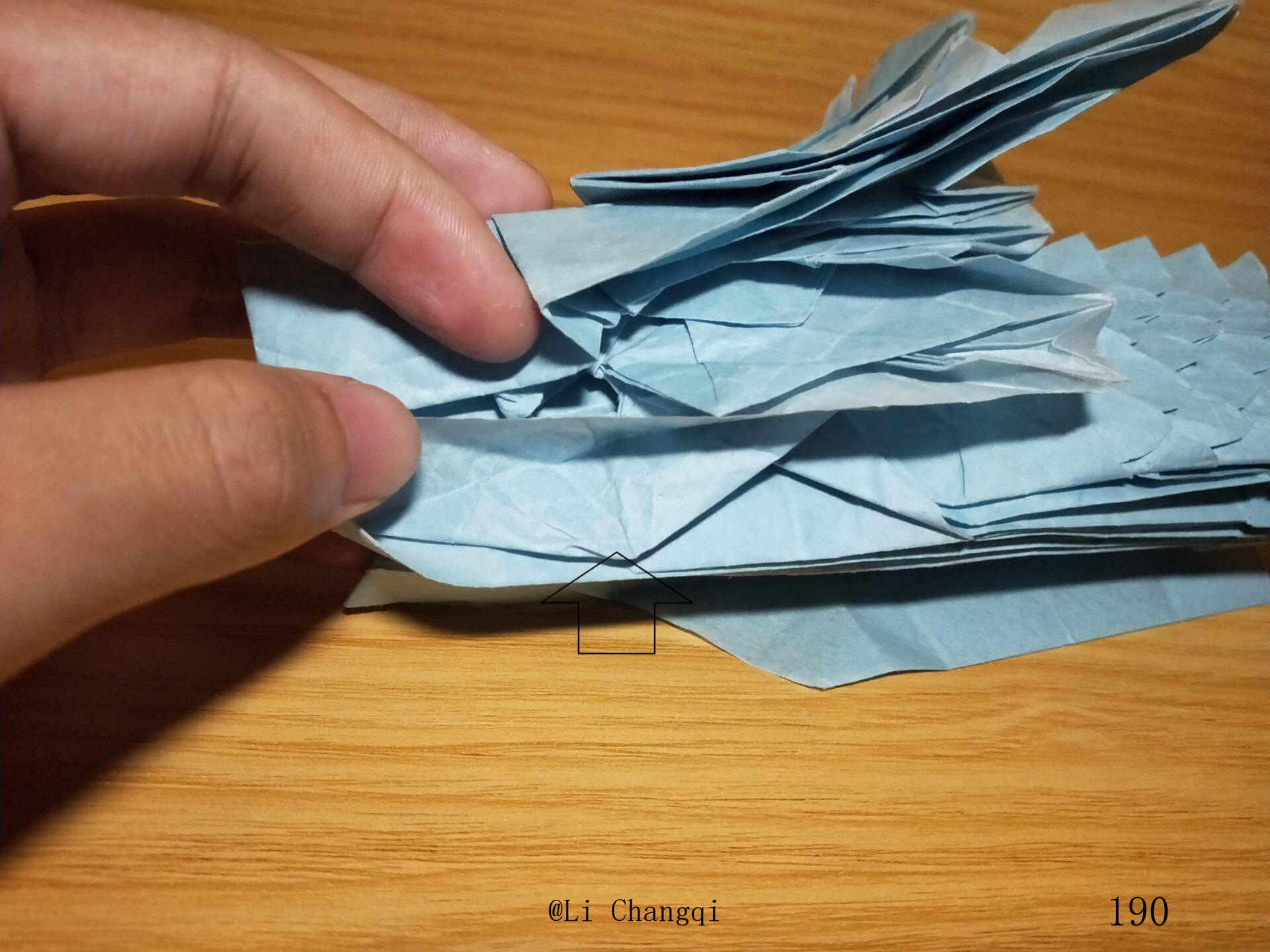

对称面相同方式处理







整形

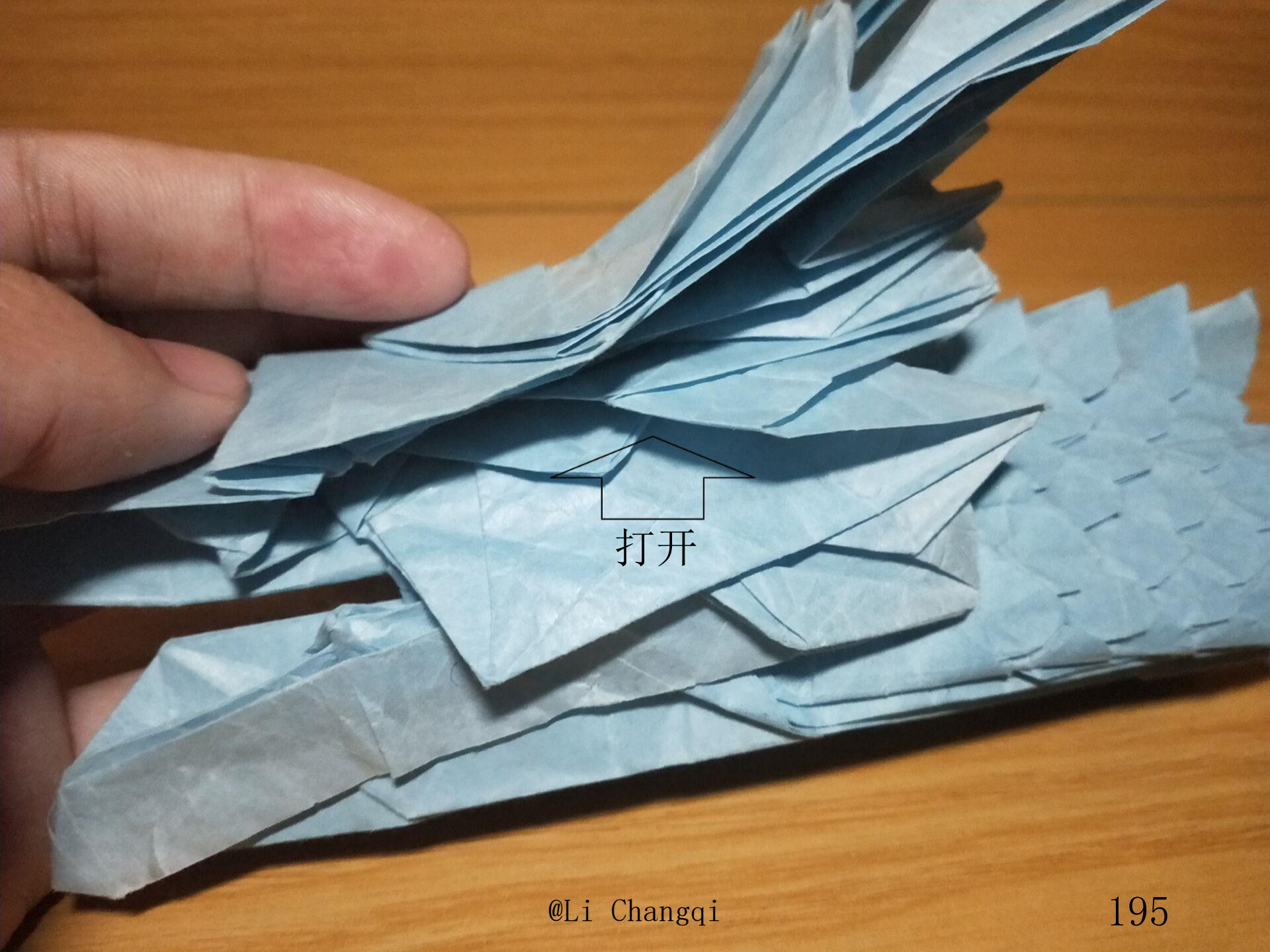


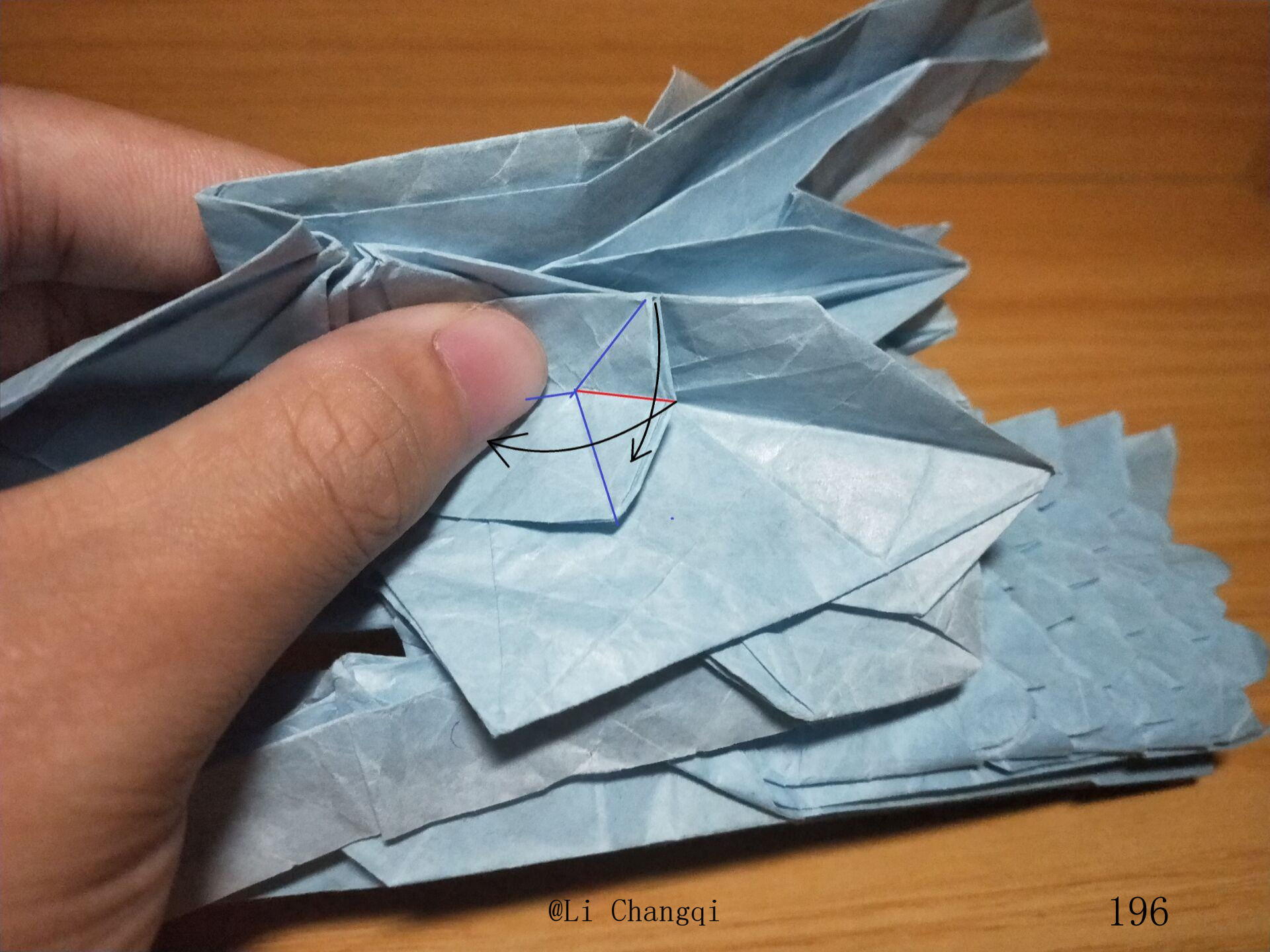

这里为下后牙

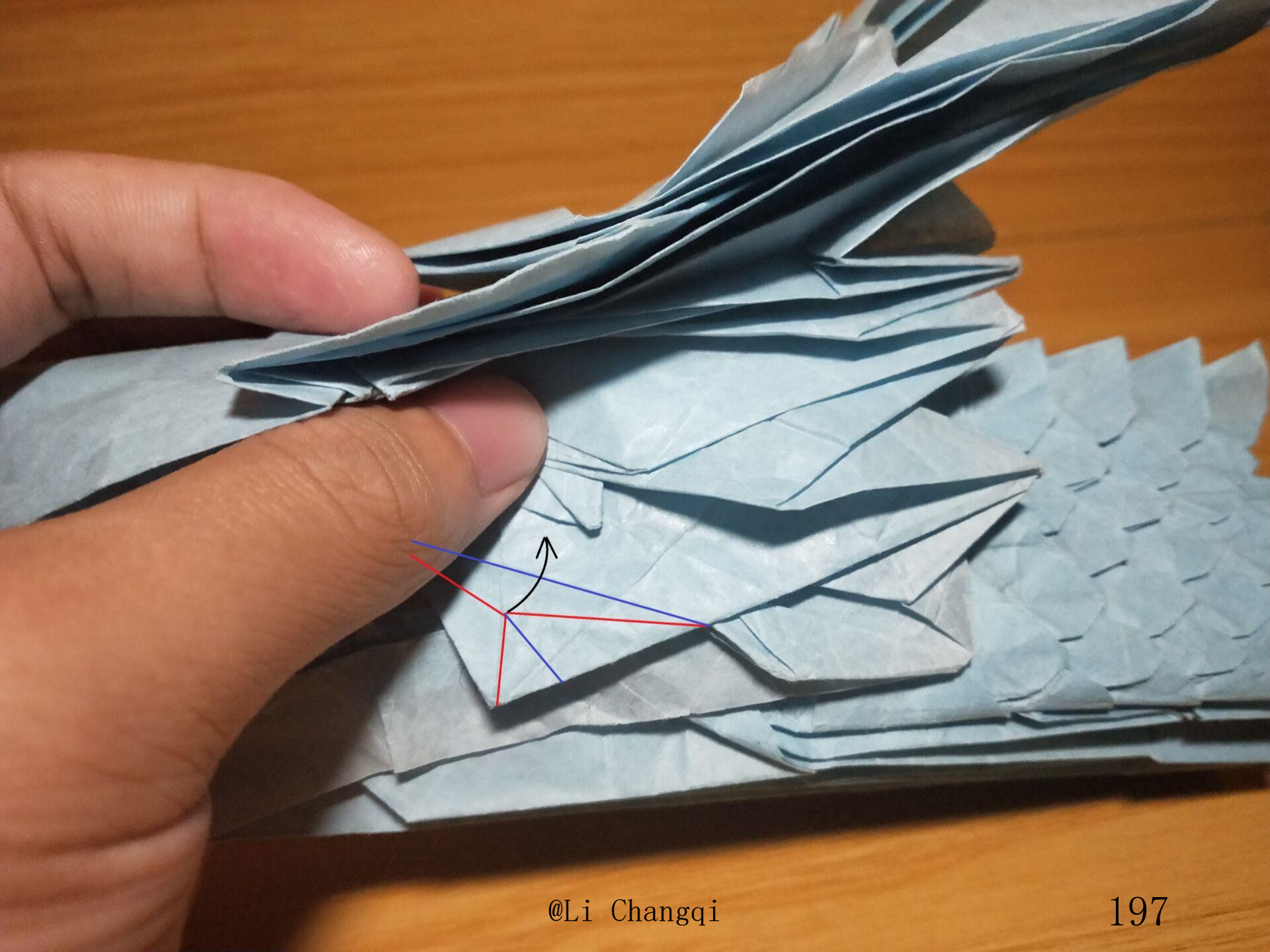




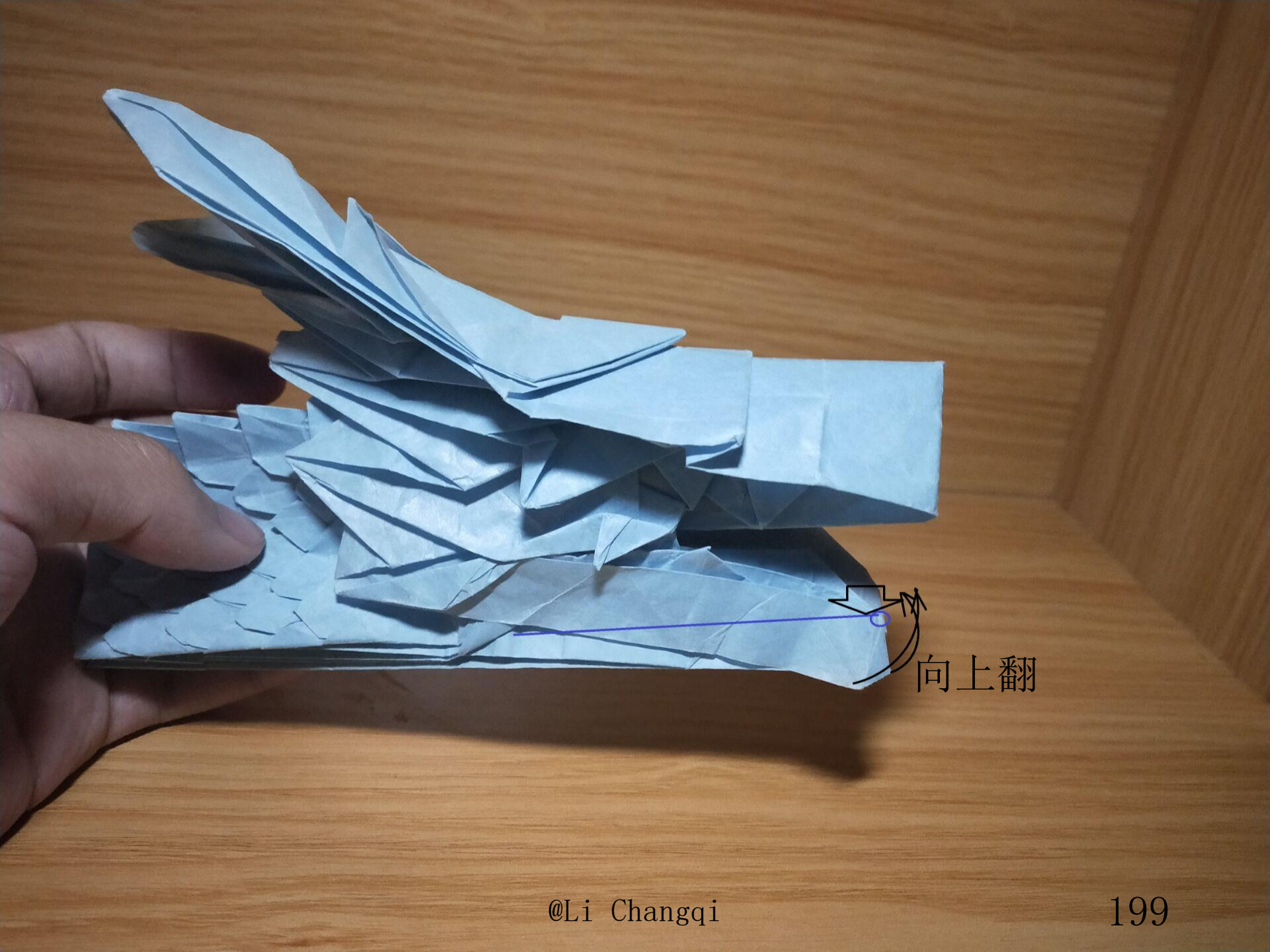

右侧重复


打开








向上翻

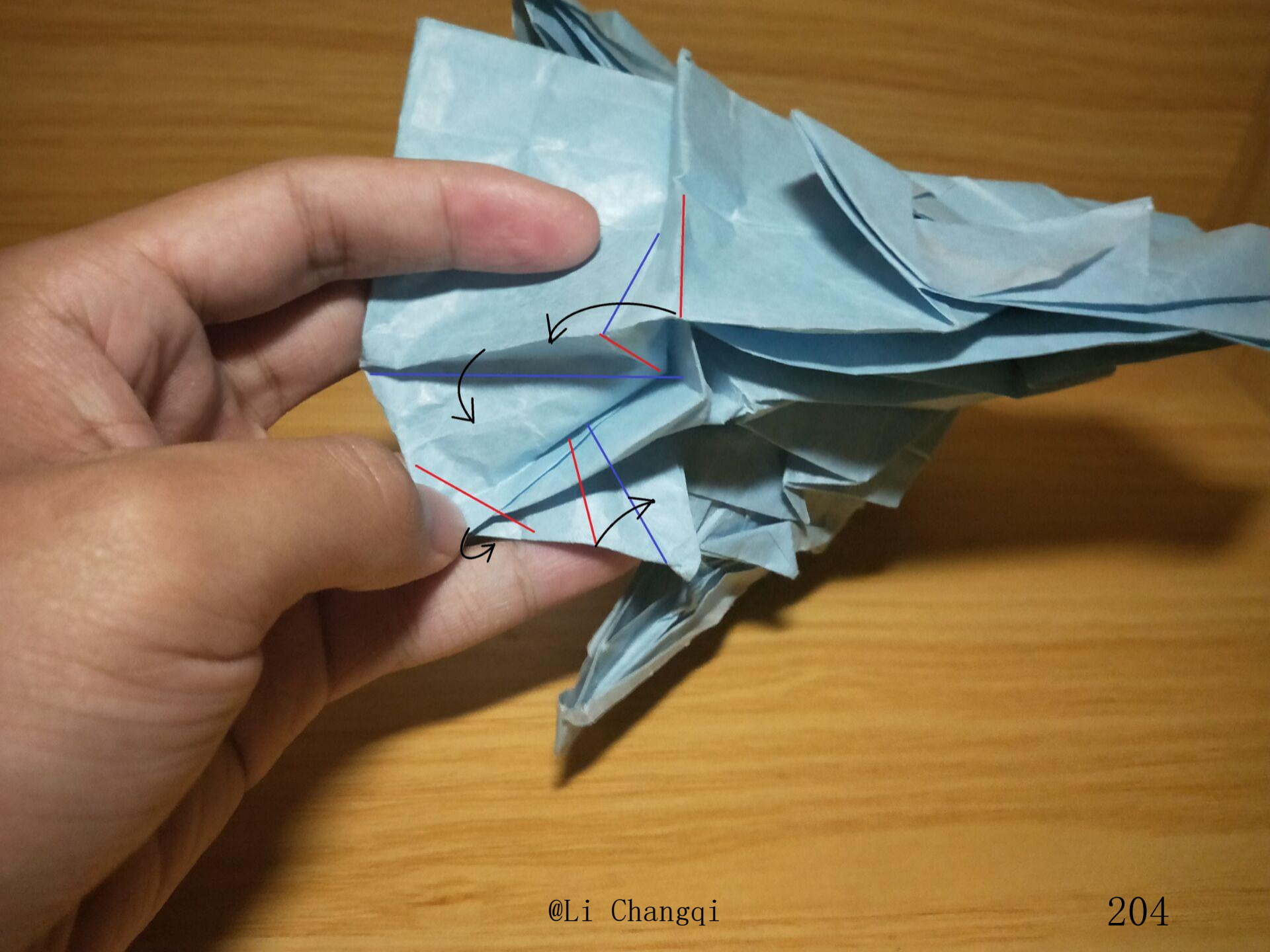


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打开

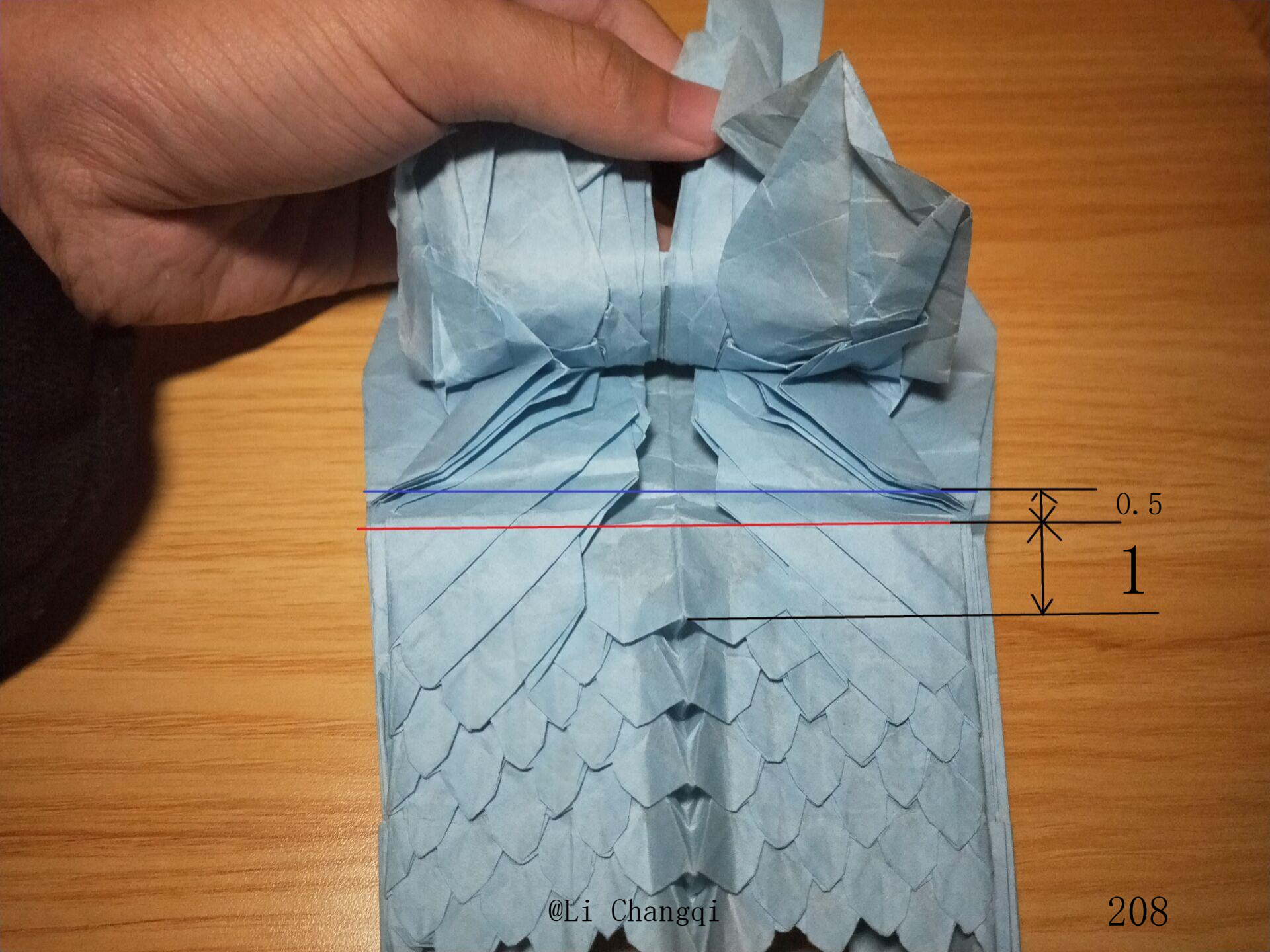

拉出








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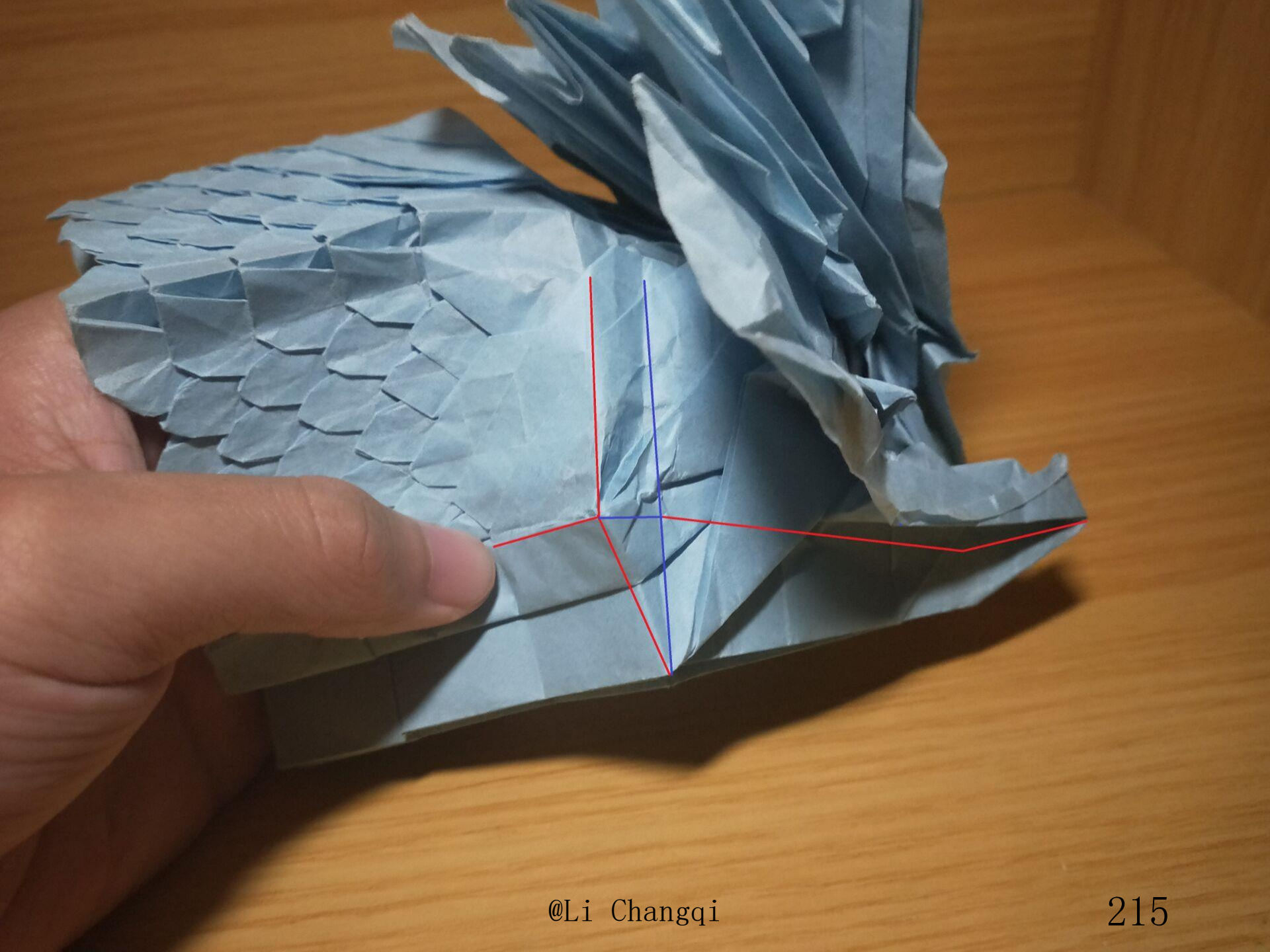
@Li Changqi



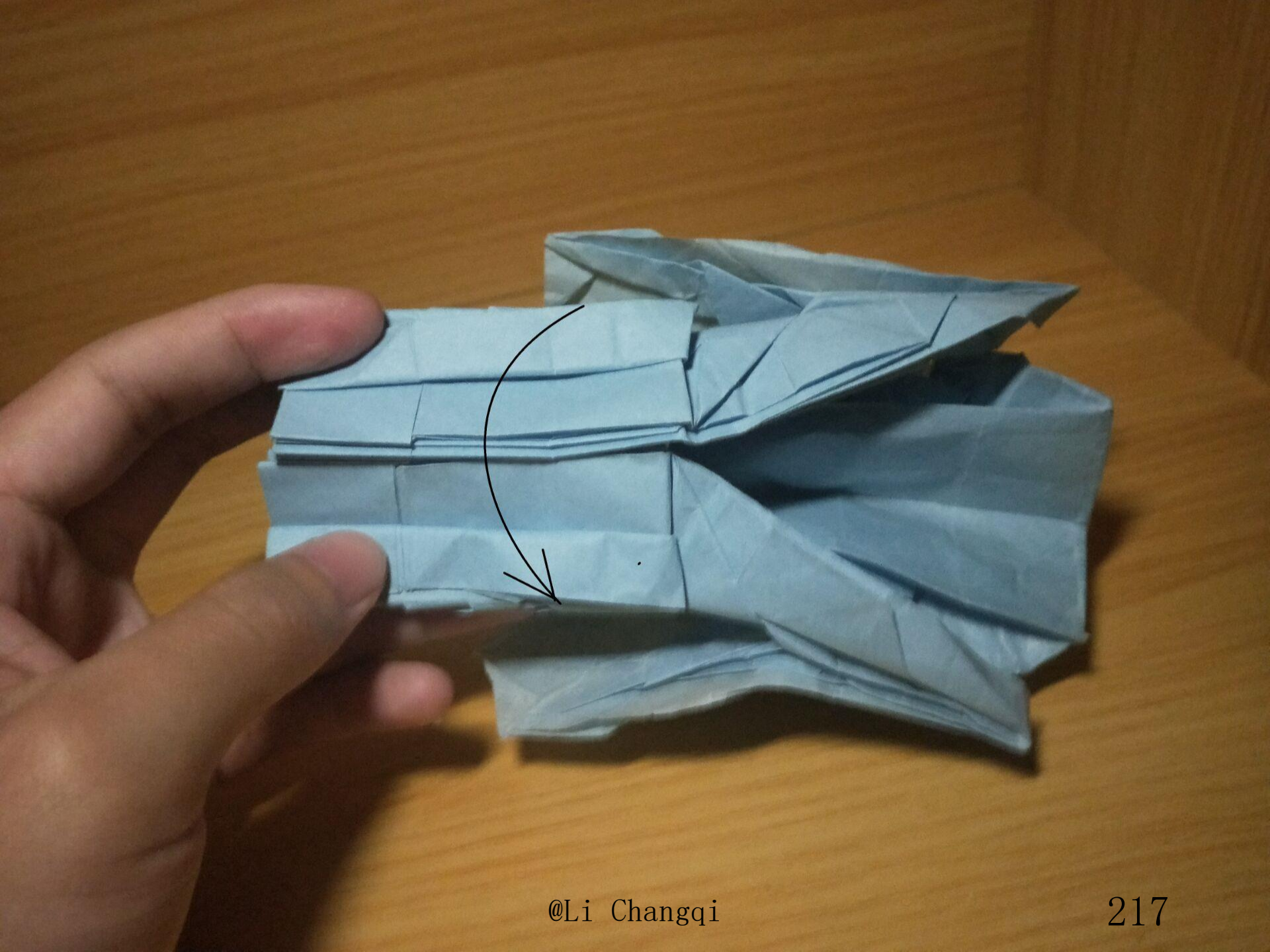





这里的纸层错开









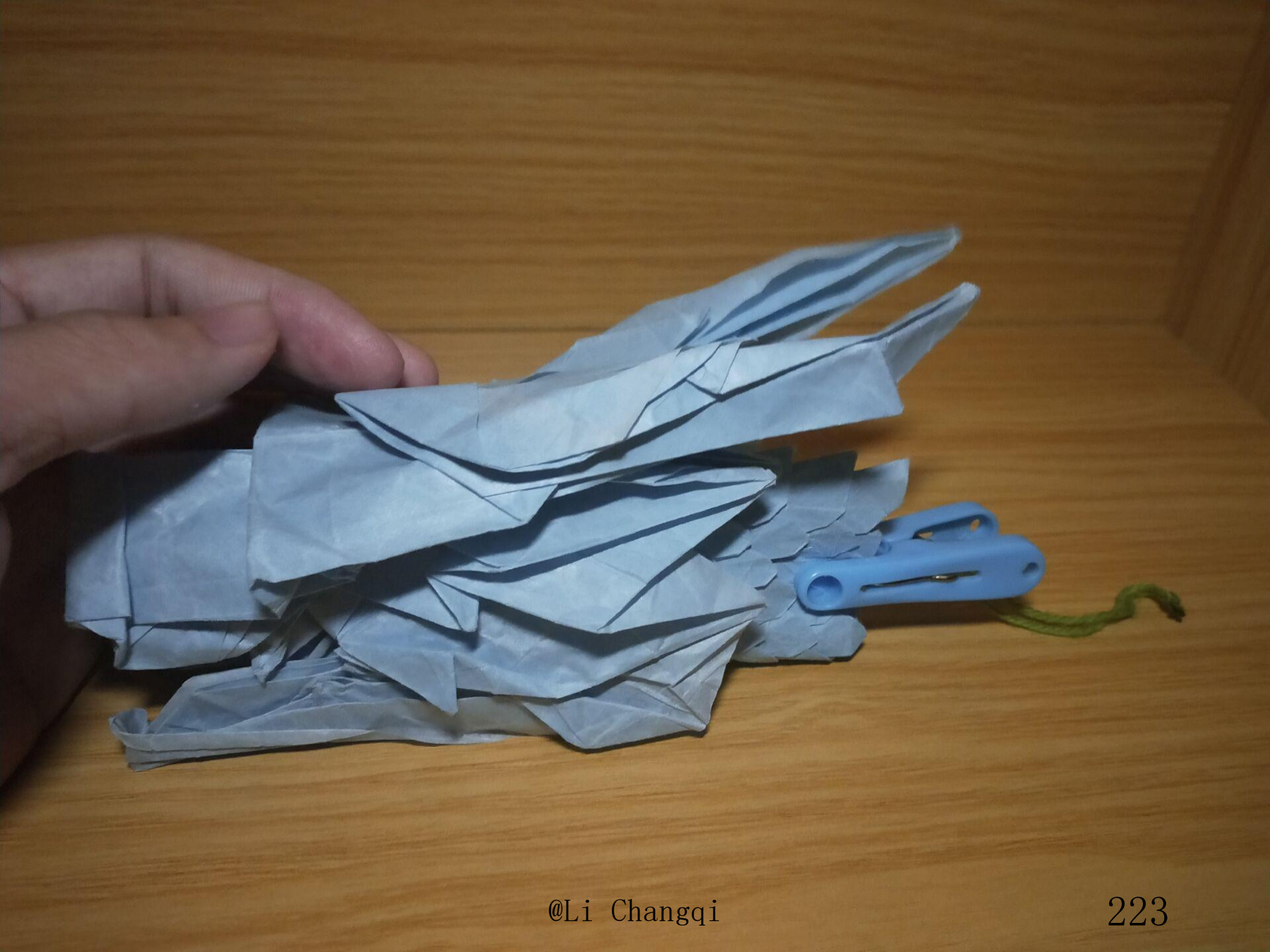
@Li Changqi


段折

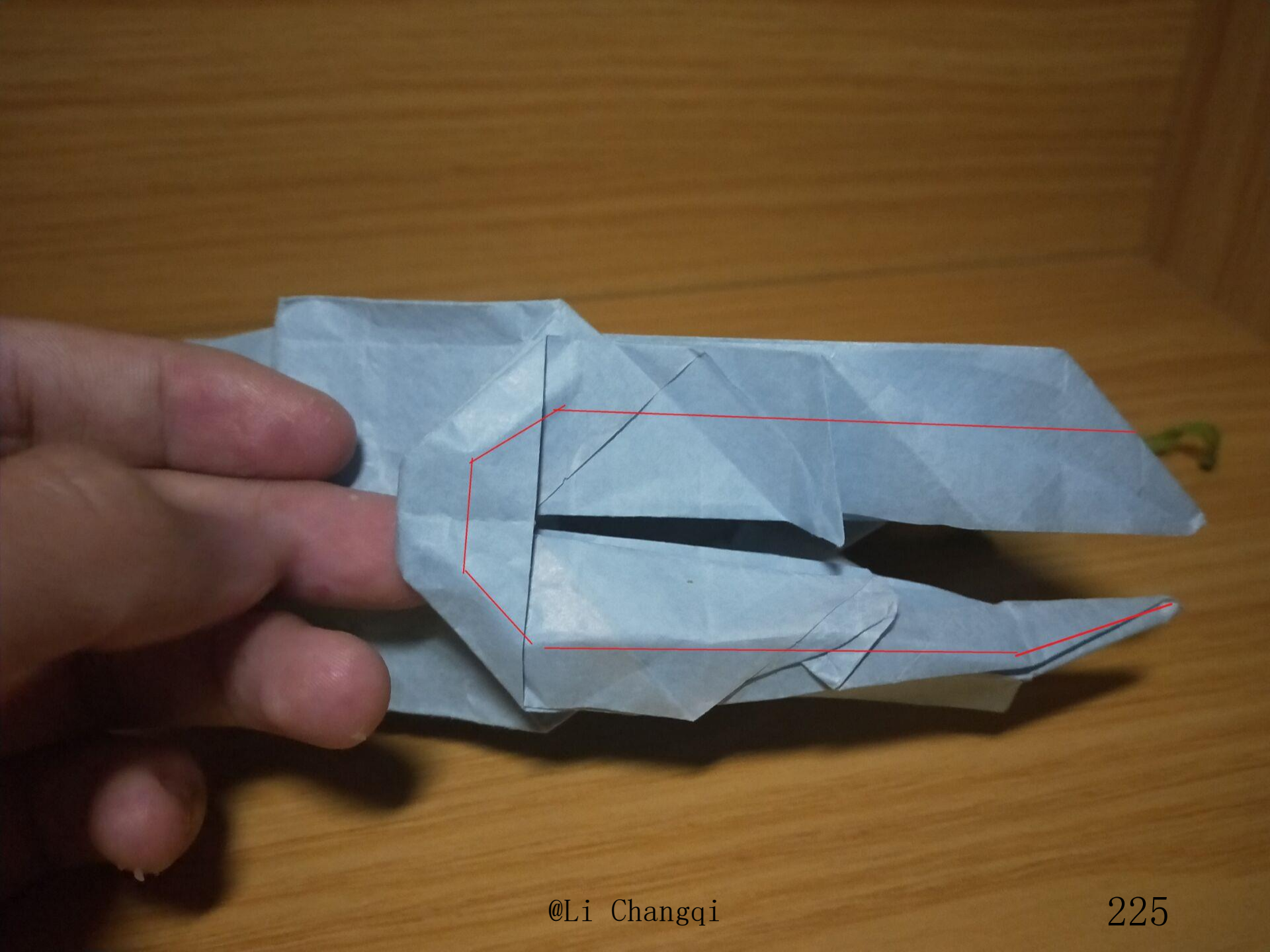



开沉












向内折

















上胶

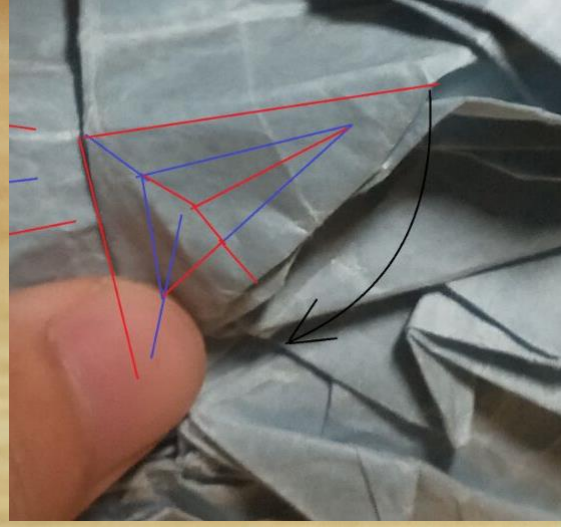
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龙角定型


上颚


上牙


下颚及下牙



眼睛同之前的方式
处理后固定






下压






按峰谷线聚合
后固定

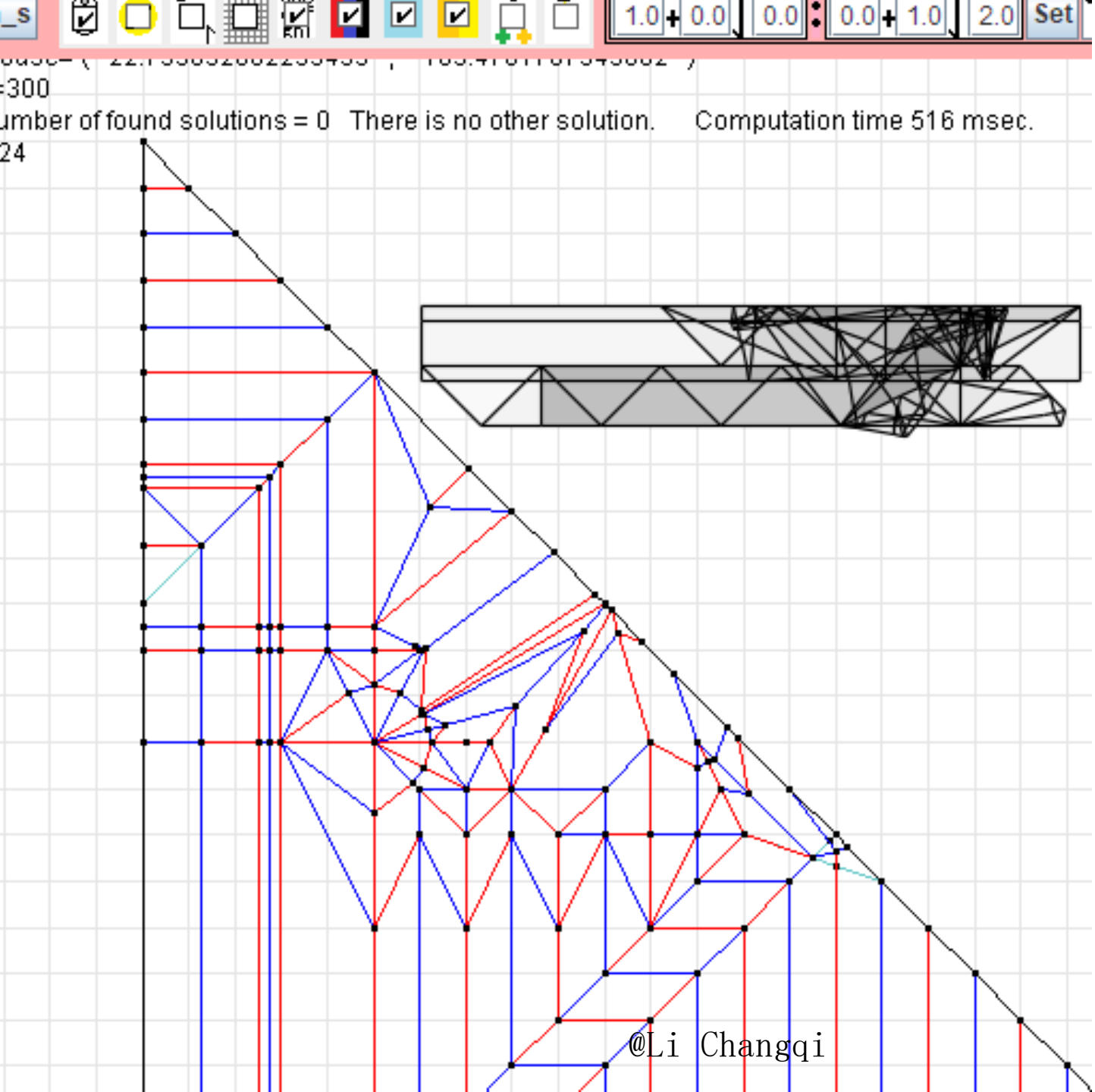


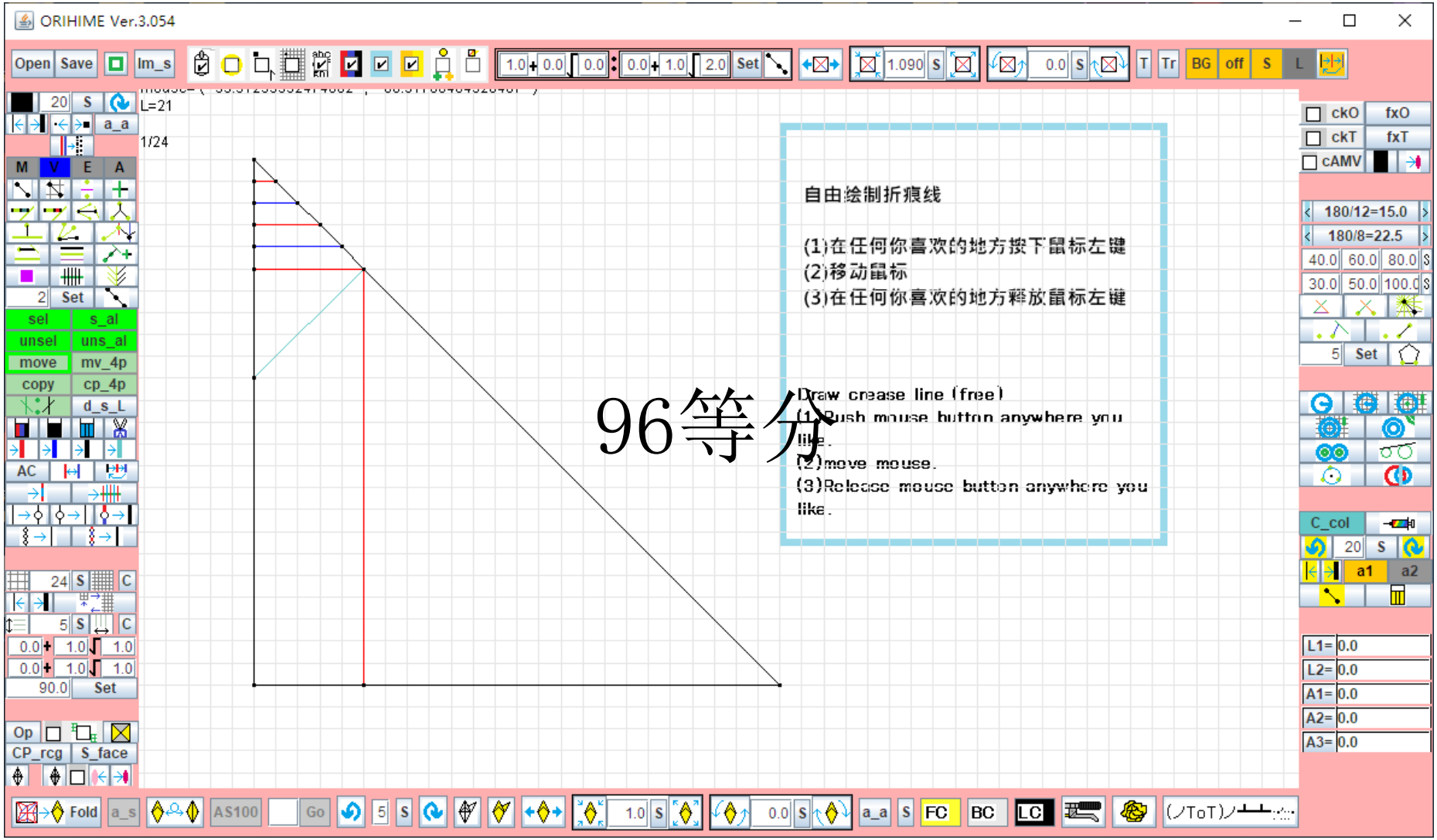
最后烫个头就好了
（整理鬃毛）

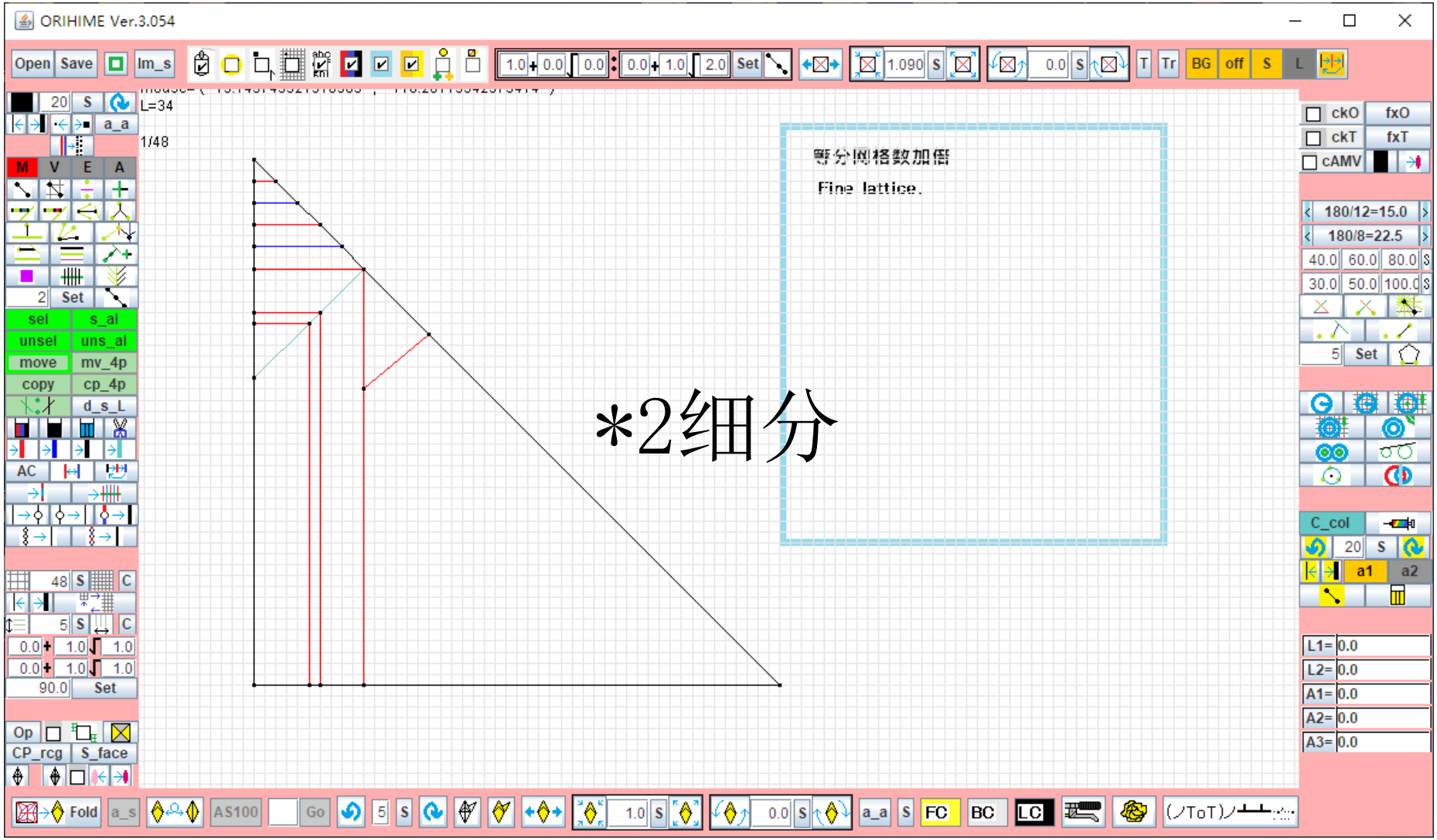


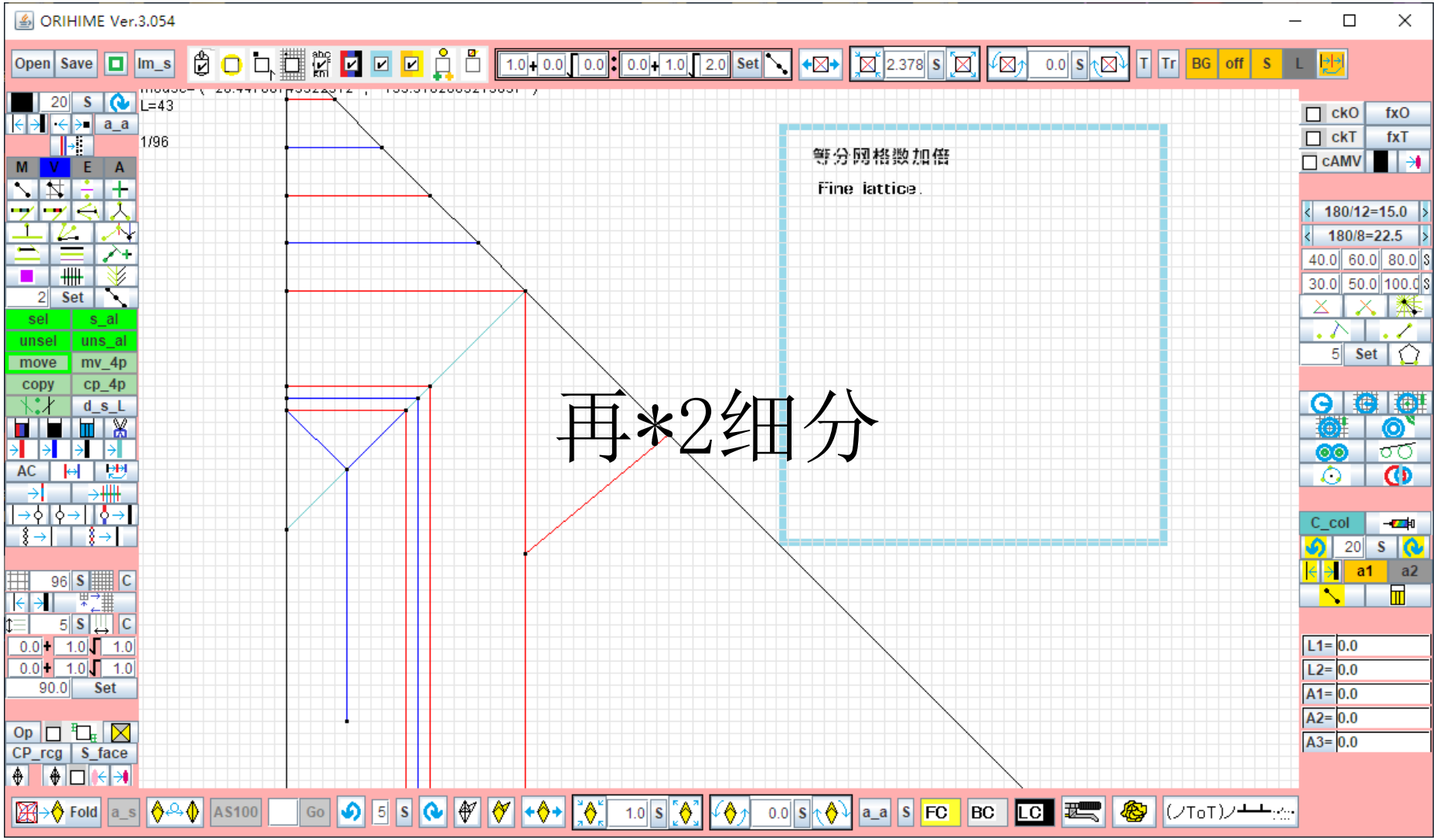
取线

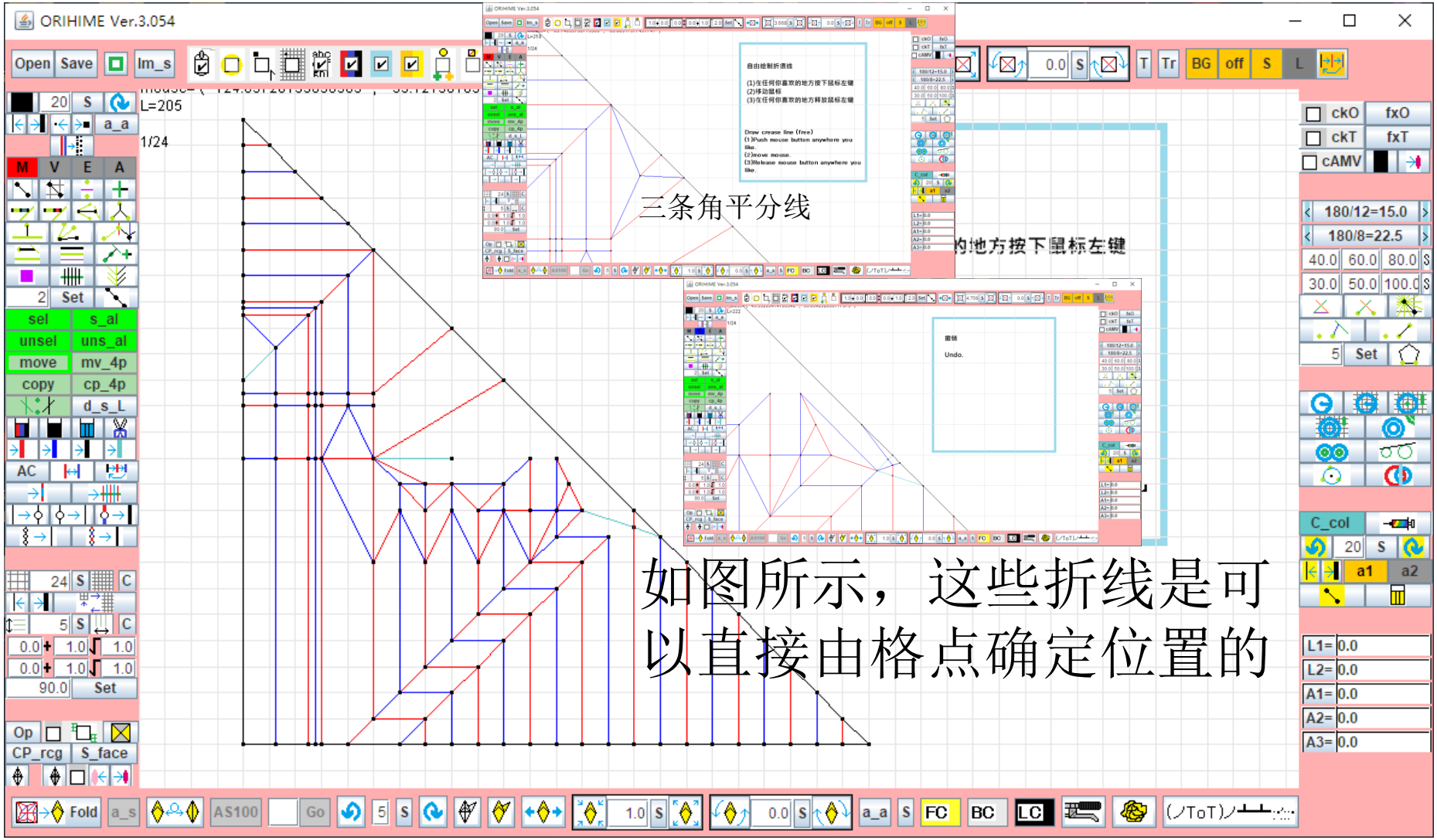
这里使用orihime来演示

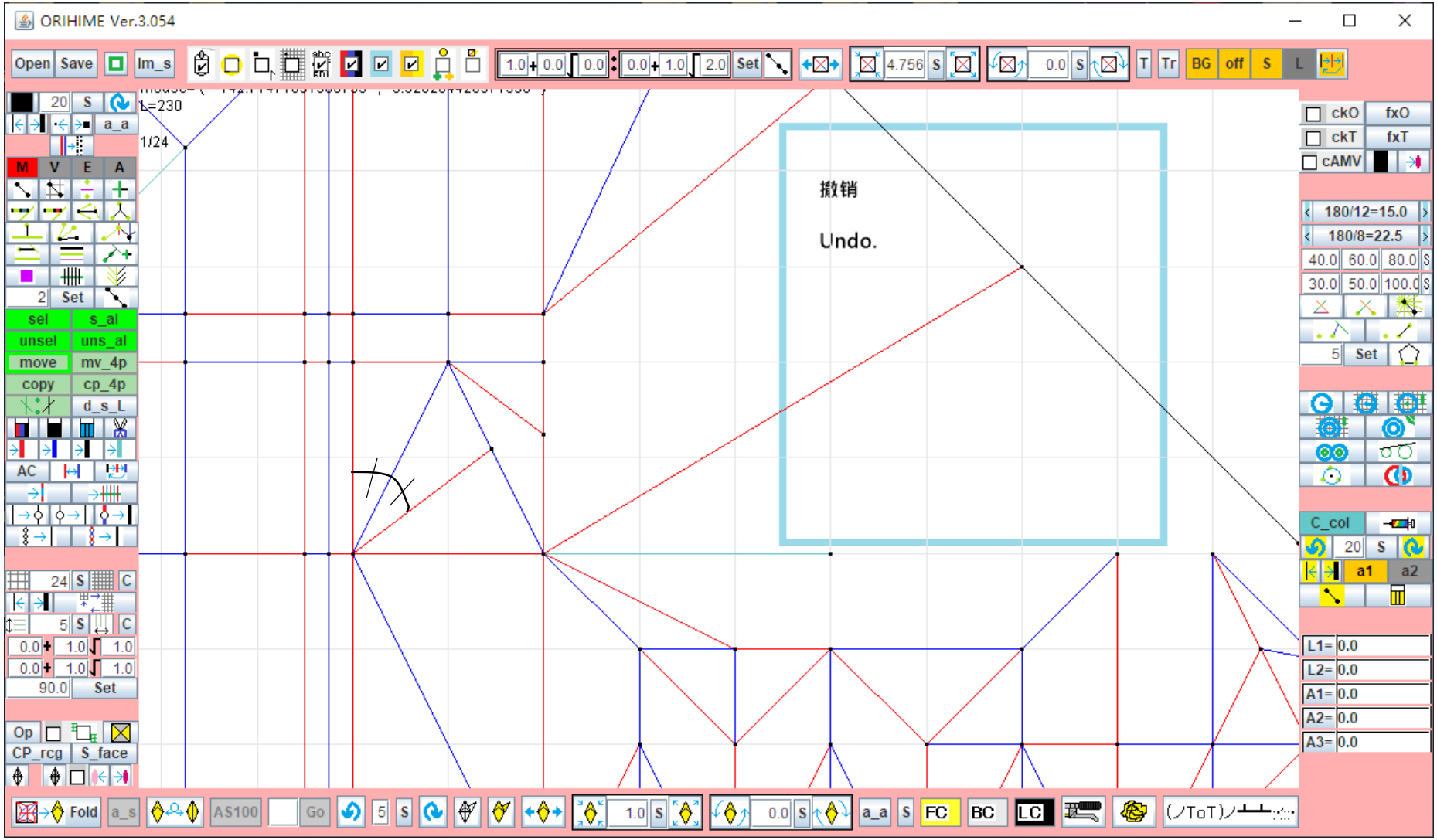


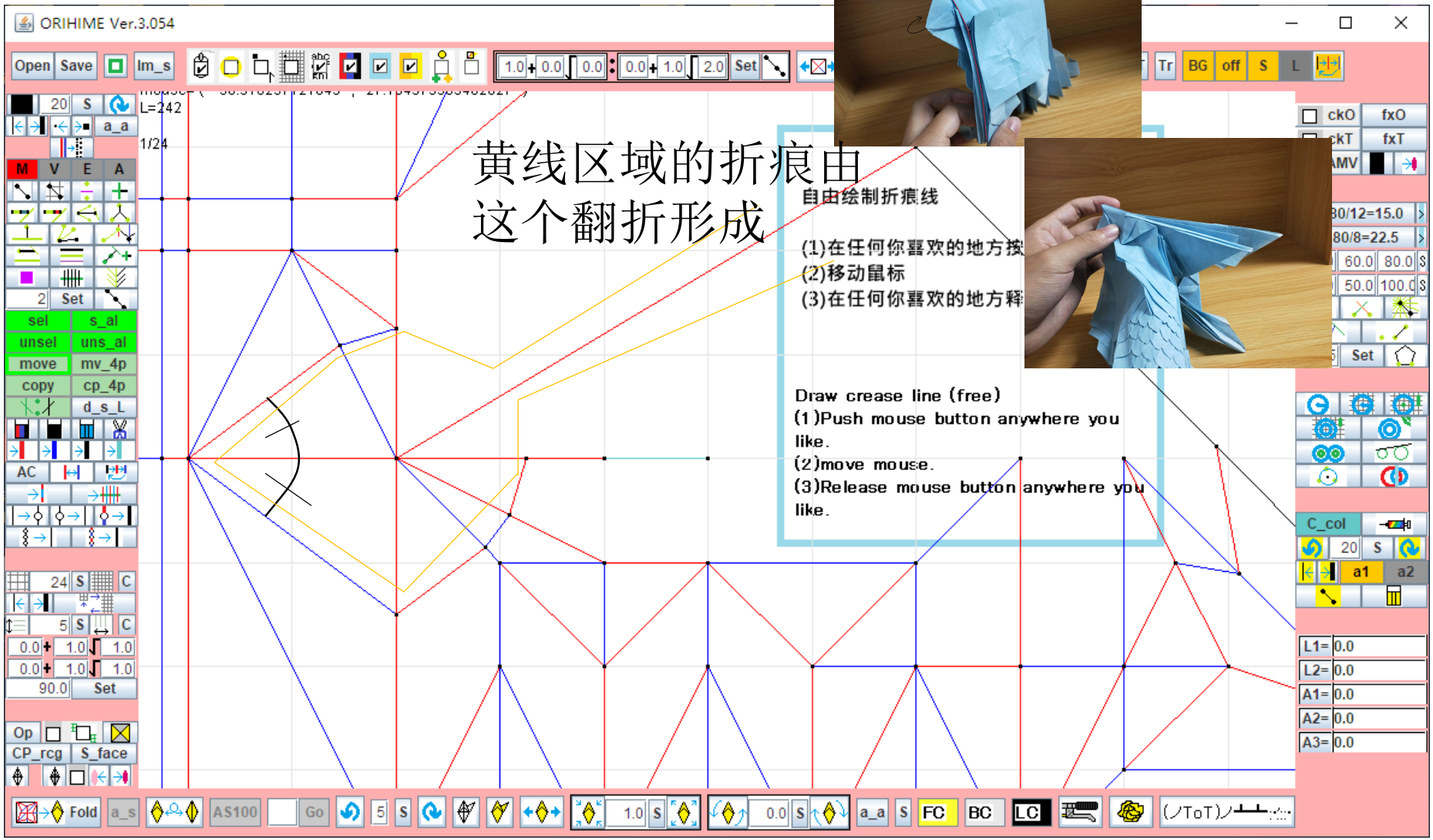

ORIHIME Ver.3.054
Open
Save
Im_s
L=21
1/24
自由绘制折痕线
(1)在任何你喜欢的地方按下鼠标左键
(2)移动鼠标
(3)在任何你喜欢的地方释放鼠标左键
96等分
Draw crease line (free)
(1)Push mouse button anywhere you like.
(2)move mouse.
(3)Release mouse button anywhere you like.
Set
sel
unsel
move
copy
AC
Op
CP_rcg
S_face
Fold
Go
ckO
ckT
cAMV
fxO
fxT
180/12=15.0
180/8=22.5
C_col
L1= 0.0
L2= 0.0
A1= 0.0
A2= 0.0
A3= 0.0

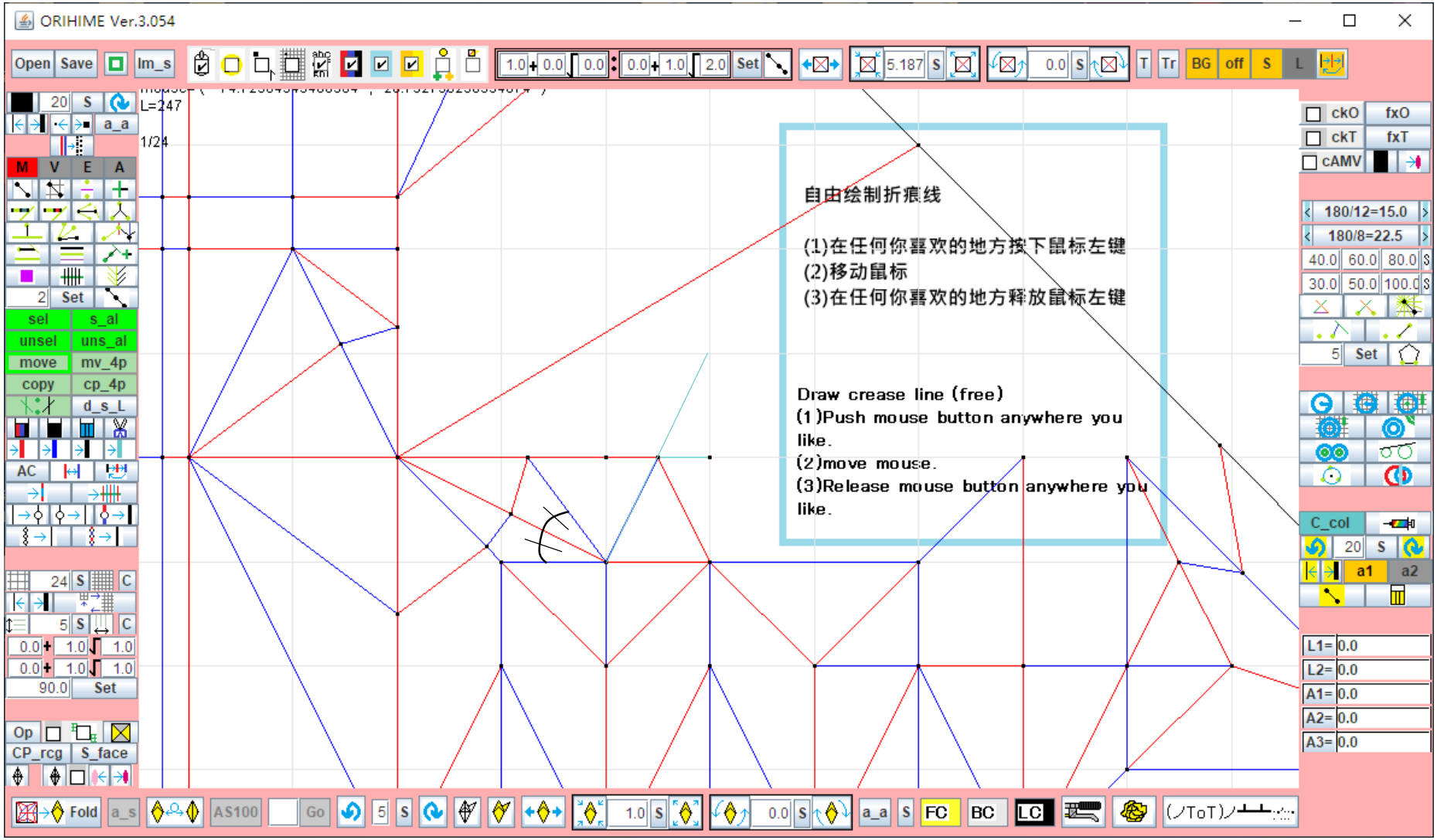

ORIHIME Ver.3.054
Open
Save
Im_s
Set
T
Tr
BG
off
S
L
L=34
1/48
M
V
E
A
a_a
sel
s_al
unsel
uns_al
move
mv_4p
copy
cp_4p
d_s_L
AC
Op
CP_rcg
S_face
Fold
a_s
AS100
Go
FC
BC
LC
ckO
fxO
ckT
fxT
cAMV
180/12=15.0
180/8=22.5
Set
C_col
a1
a2
L1= 0.0
L2= 0.0
A1= 0.0
A2= 0.0
A3= 0.0
野分网格数加倍
Fine lattice.
*2细分

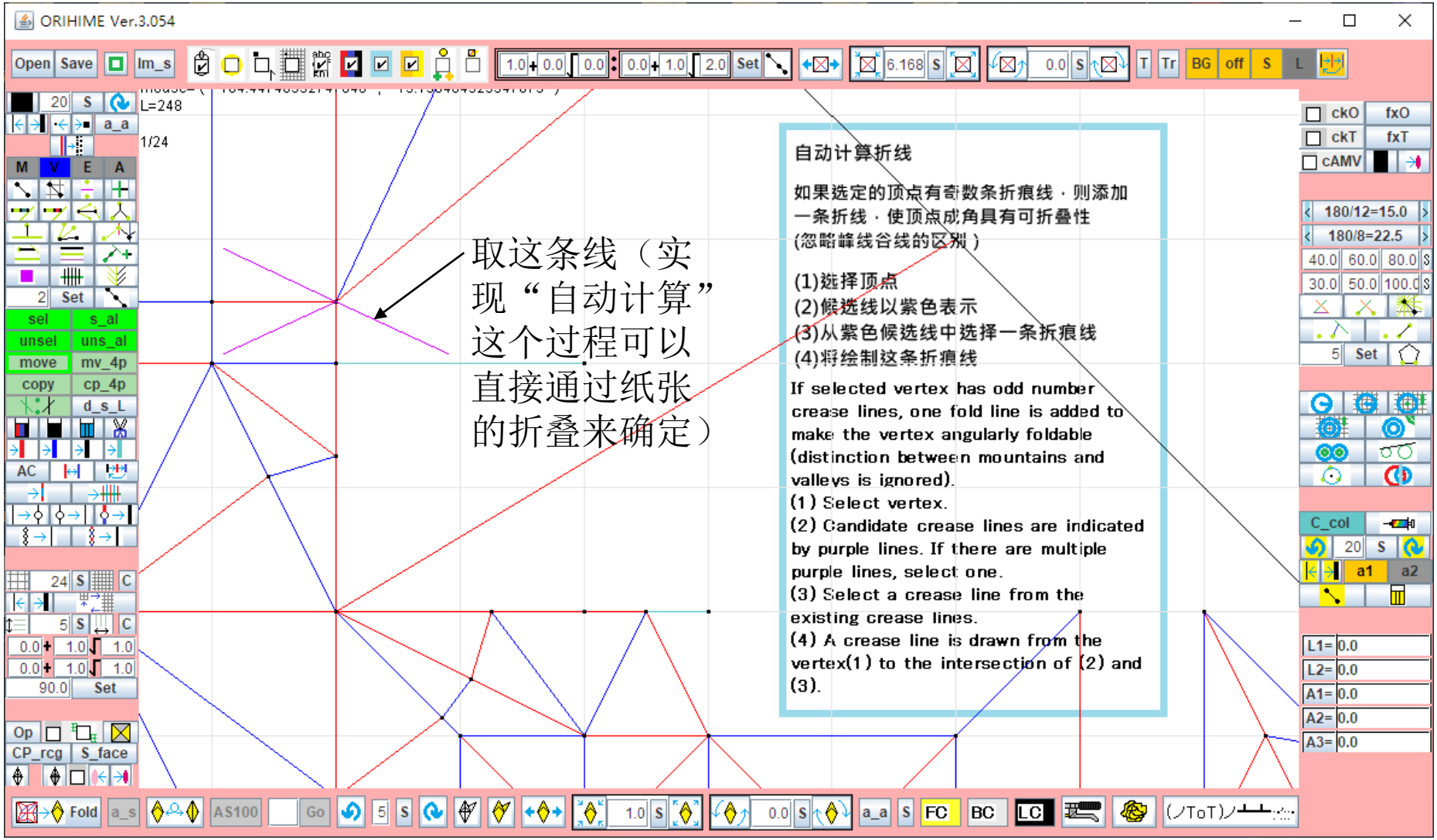

ORIHIME Ver.3.054
Open
Save
Im_s
Set
T
Tr
BG
off
L=43
1/96
等分网格数加倍
Fine lattice.
再*2细分
sel
s_al
unsel
uns_al
move
mv_4p
copy
cp_4p
d_s_L
AC
Op
CP_rcg
S_face
Fold
AS100
Go
ckO
fxO
ckT
fxT
cAMV
180/12=15.0
180/8=22.5
C_col
a1
a2
L1=
L2=
A1=
A2=
A3=
FC
BC
LC

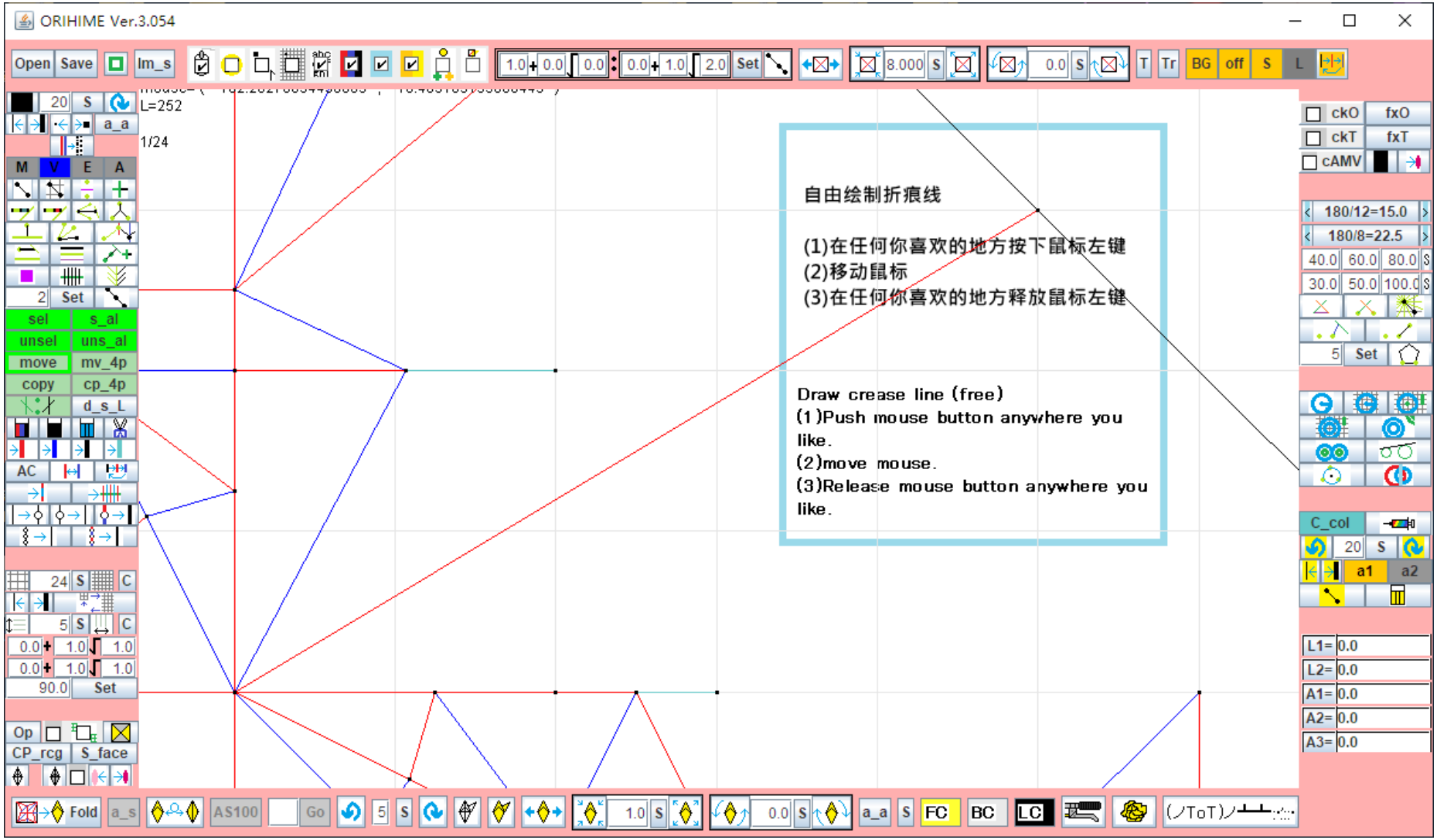

ORIHIME Ver.3.054
三条角平分线
如图所示，这些折线是可
以直接由格点确定位置的

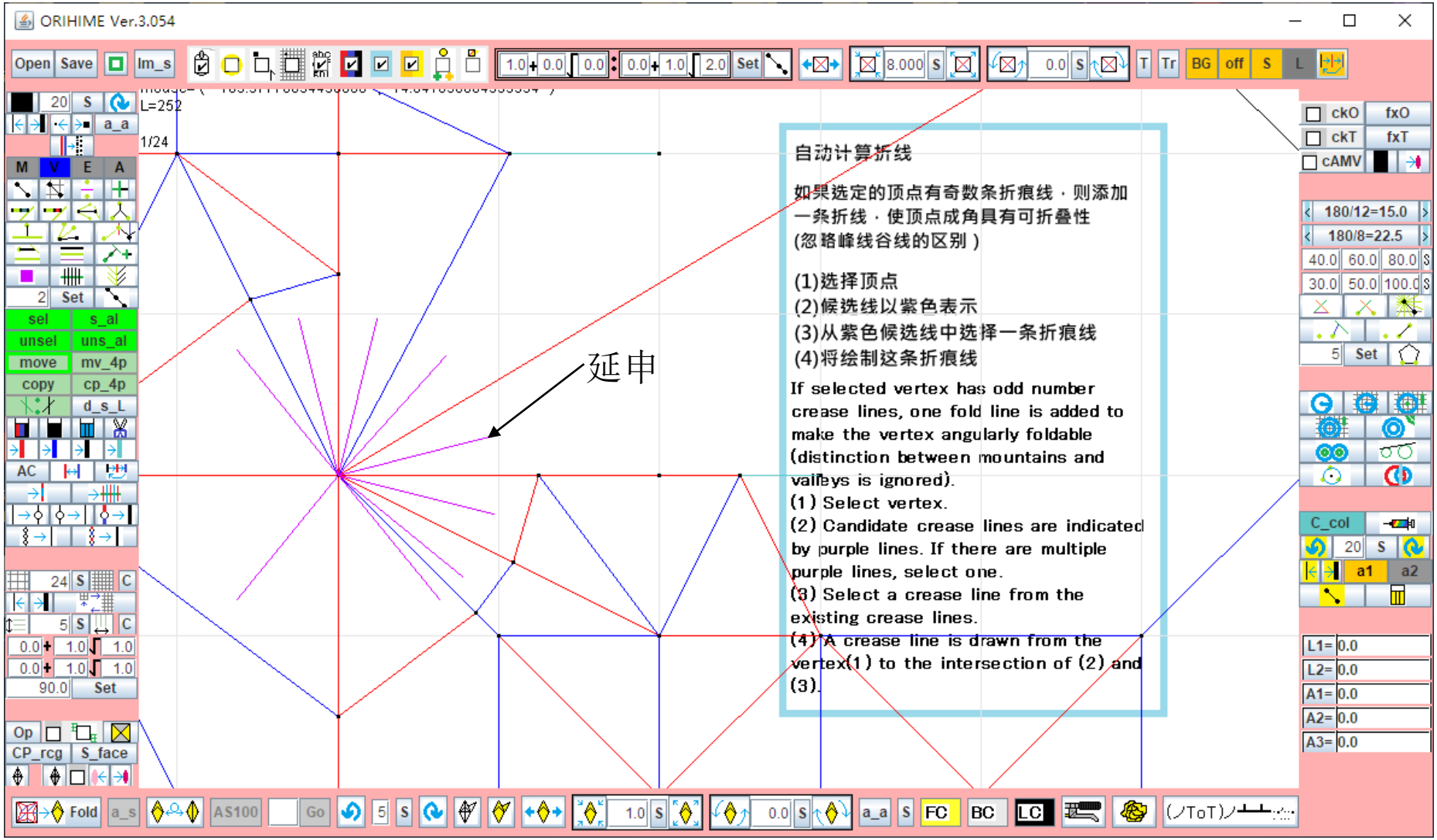

ORIHIME Ver.3.054
Open
Save
Im_s
Set
T
Tr
BG
off
L=230
1/24
撤销
Undo.
sel
s_al
unsel
uns_al
move
mv_4p
copy
cp_4p
d_s_L
AC
CP_rcg
S_face
Fold
AS100
Go
FC
BC
LC
ckO
fxO
ckT
fxT
cAMV
180/12=15.0
180/8=22.5
C_col
a1
a2
L1=
L2=
A1=
A2=
A3=

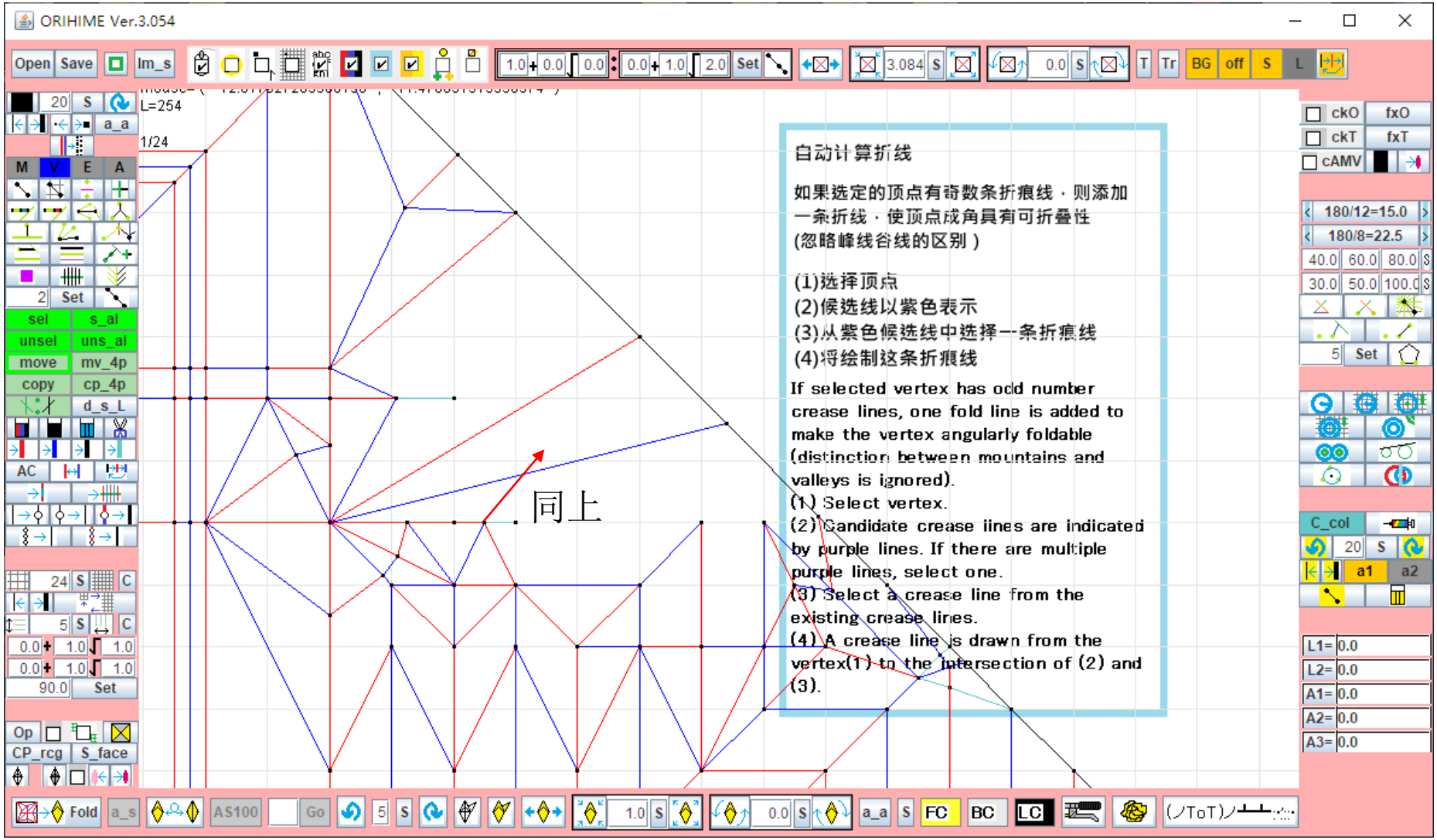

ORIHIME Ver.3.054
黄线区域的折痕由
这个翻折形成
自由绘制折痕线
(1)在任何你喜欢的地方按
(2)移动鼠标
(3)在任何你喜欢的地方释
Draw crease line (free)
(1)Push mouse button anywhere you like.
(2)move mouse.
(3)Release mouse button anywhere you like.

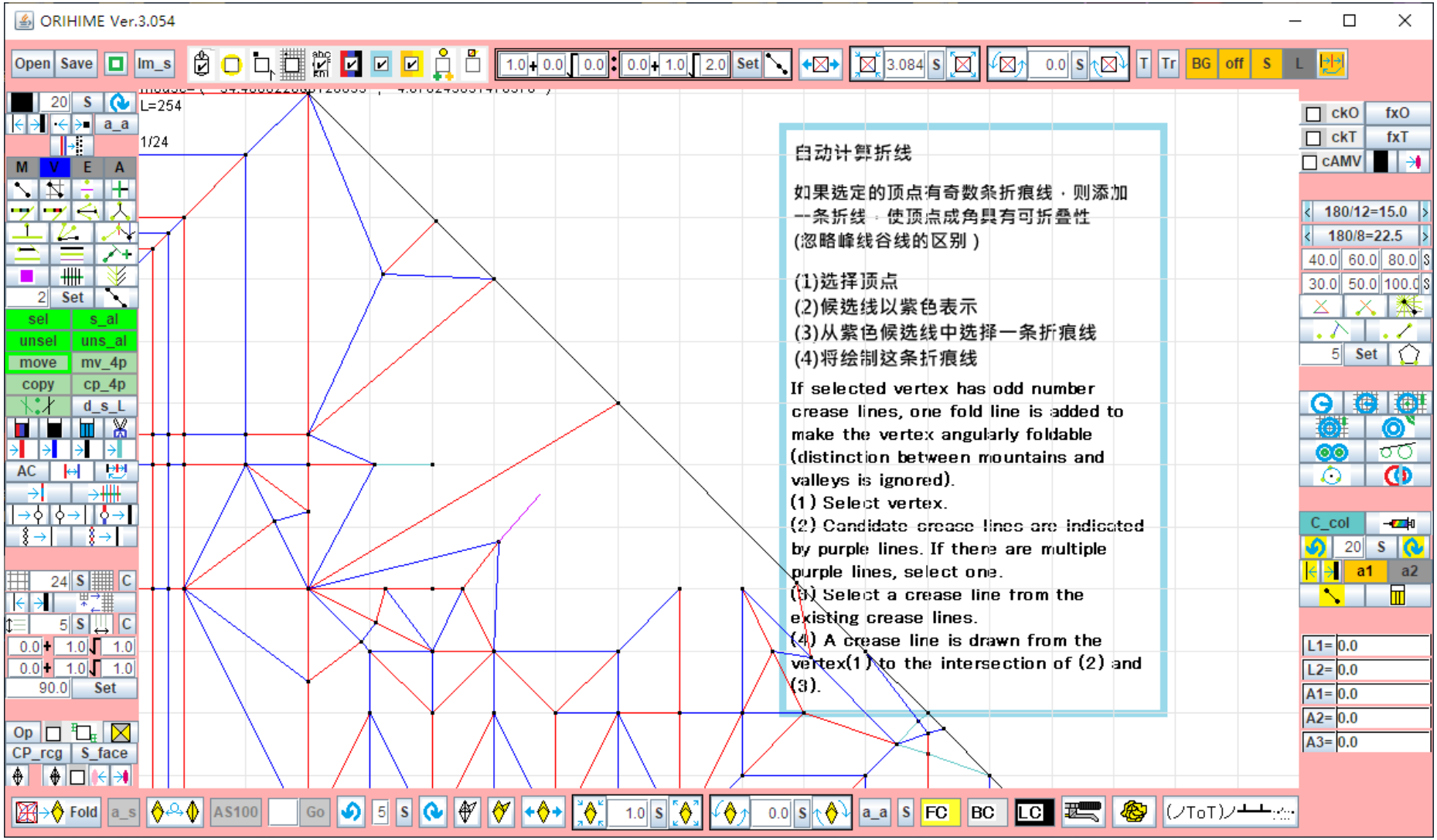

ORIHIME Ver.3.054
Open
Save
Im_s
Set
L=247
1/24
自由绘制折痕线
(1)在任何你喜欢的地方按下鼠标左键
(2)移动鼠标
(3)在任何你喜欢的地方释放鼠标左键
Draw crease line (free)
(1)Push mouse button anywhere you like.
(2)move mouse.
(3)Release mouse button anywhere you like.
sel
s_al
unsel
uns_al
move
mv_4p
copy
cp_4p
d_s_L
AC
Op
CP_rcg
S_face
Fold
AS100
Go
FC
BC
LC
C_col
a1
a2
L1=
L2=
A1=
A2=
A3=

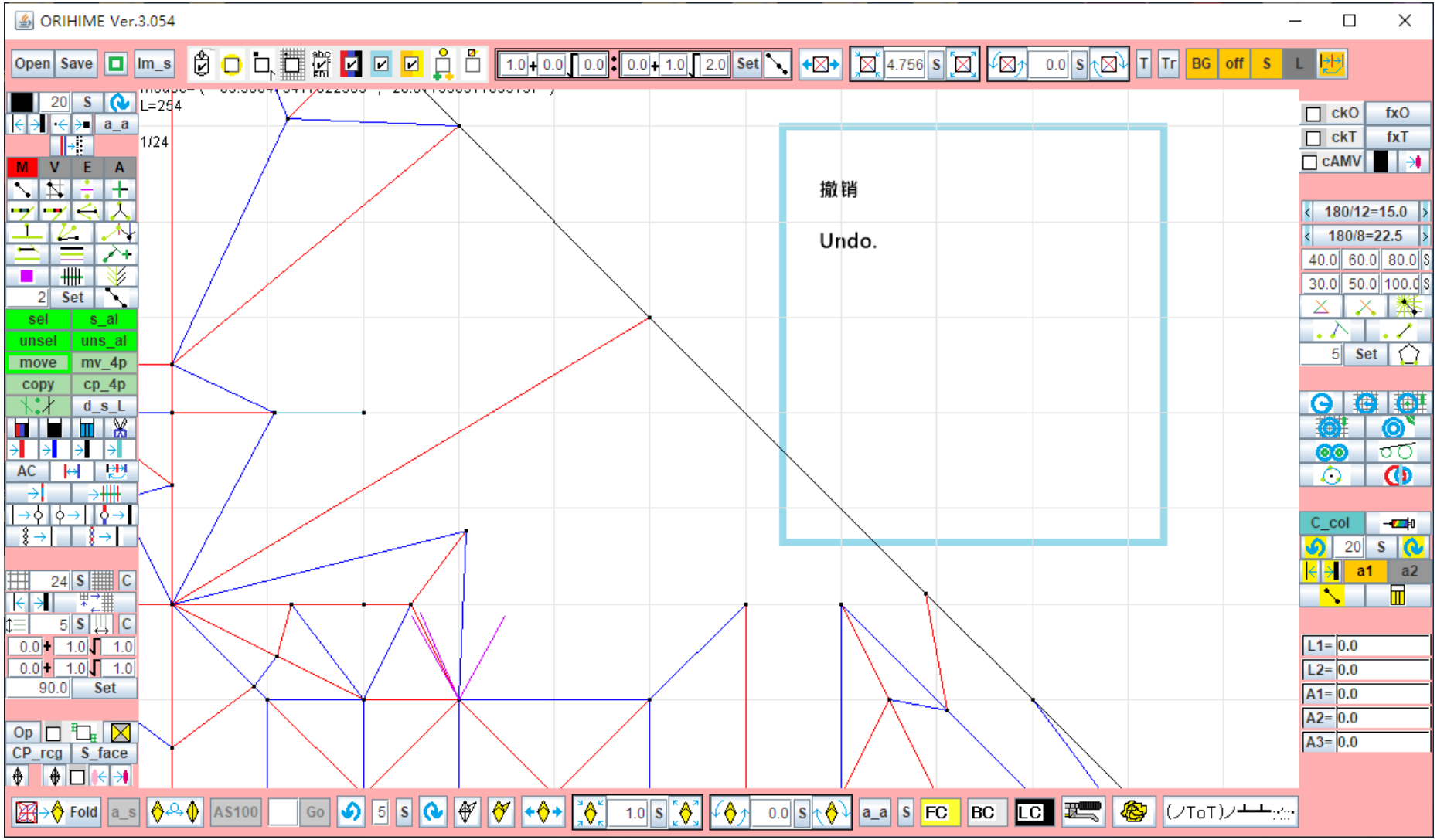

ORIHIME Ver.3.054
Open
Save
Im_s
L=248
1/24
自动计算折线
如果选定的顶点有奇数条折痕线，则添加一条折线，使顶点成角具有可折叠性
(忽略峰线谷线的区别)
(1)选择顶点
(2)候选线以紫色表示
(3)从紫色候选线中选择一条折痕线
(4)将绘制这条折痕线
If selected vertex has odd number crease lines, one fold line is added to make the vertex angularly foldable (distinction between mountains and valleys is ignored).
(1) Select vertex.
(2) Candidate crease lines are indicated by purple lines. If there are multiple purple lines, select one.
(3) Select a crease line from the existing crease lines.
(4) A crease line is drawn from the vertex(1) to the intersection of (2) and (3).
取这条线（实现“自动计算”这个过程可以直接通过纸张的折叠来确定）
Fold
Go
FC
BC
LC

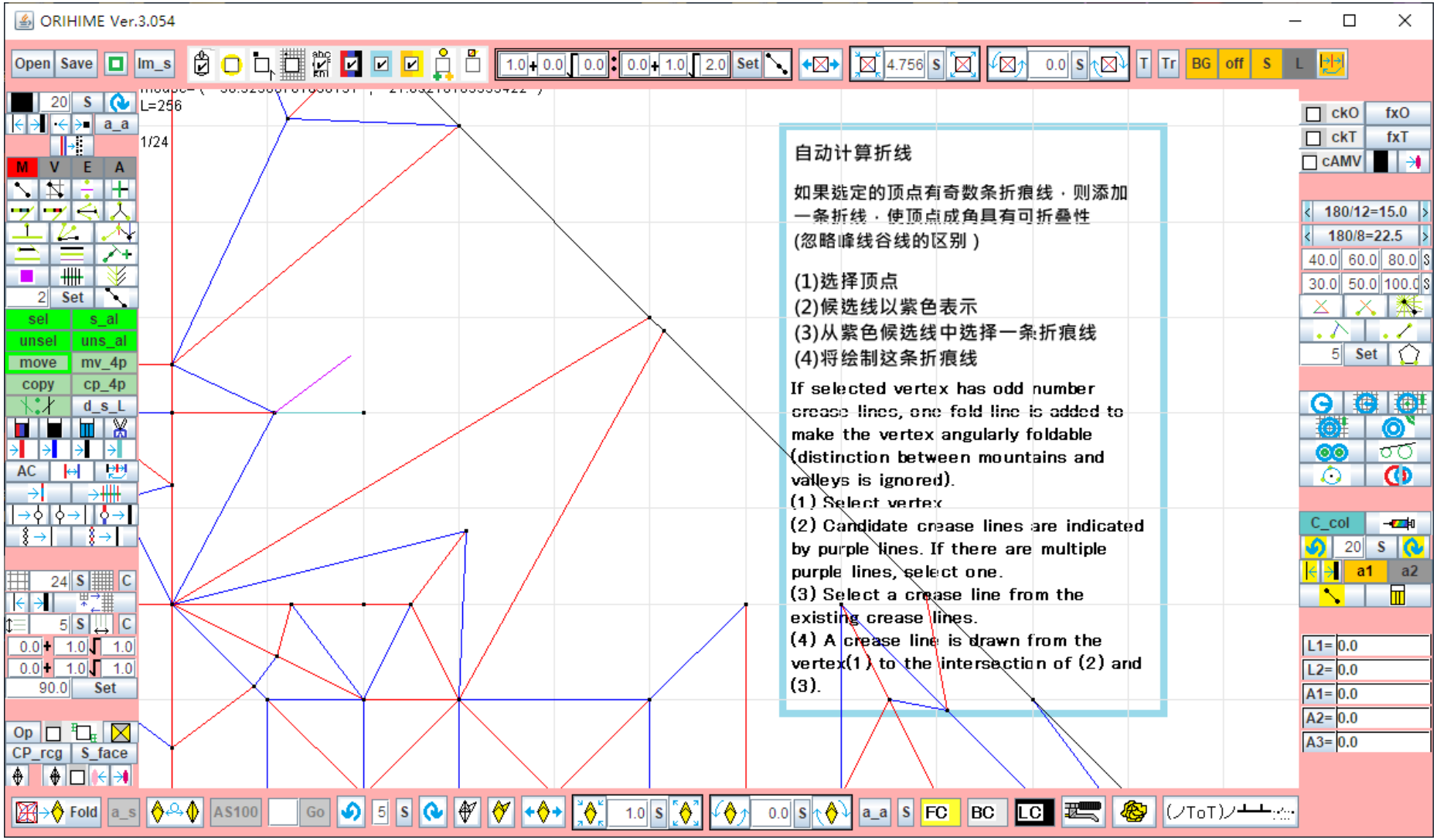

ORIHIME Ver.3.054
Open
Save
Im_s
Set
8.000
0.0
T
Tr
BG
off
S
L
20
a_a
L=252
1/24
M
V
E
A
2
Set
sel
s_al
unsel
uns_al
move
mv_4p
copy
cp_4p
d_s_L
AC
24
C
5
0.0
1.0
90.0
Op
CP_rcg
S_face
自由绘制折痕线
(1)在任何你喜欢的地方按下鼠标左键
(2)移动鼠标
(3)在任何你喜欢的地方释放鼠标左键
Draw crease line (free)
(1)Push mouse button anywhere you like.
(2)move mouse.
(3)Release mouse button anywhere you like.
ckO
fxO
ckT
fxT
cAMV
180/12=15.0
180/8=22.5
40.0
60.0
80.0
30.0
50.0
100.0
5
Set
C_col
20
a1
a2
L1= 0.0
L2= 0.0
A1= 0.0
A2= 0.0
A3= 0.0
Fold
a_s
AS100
Go
FC
BC
LC

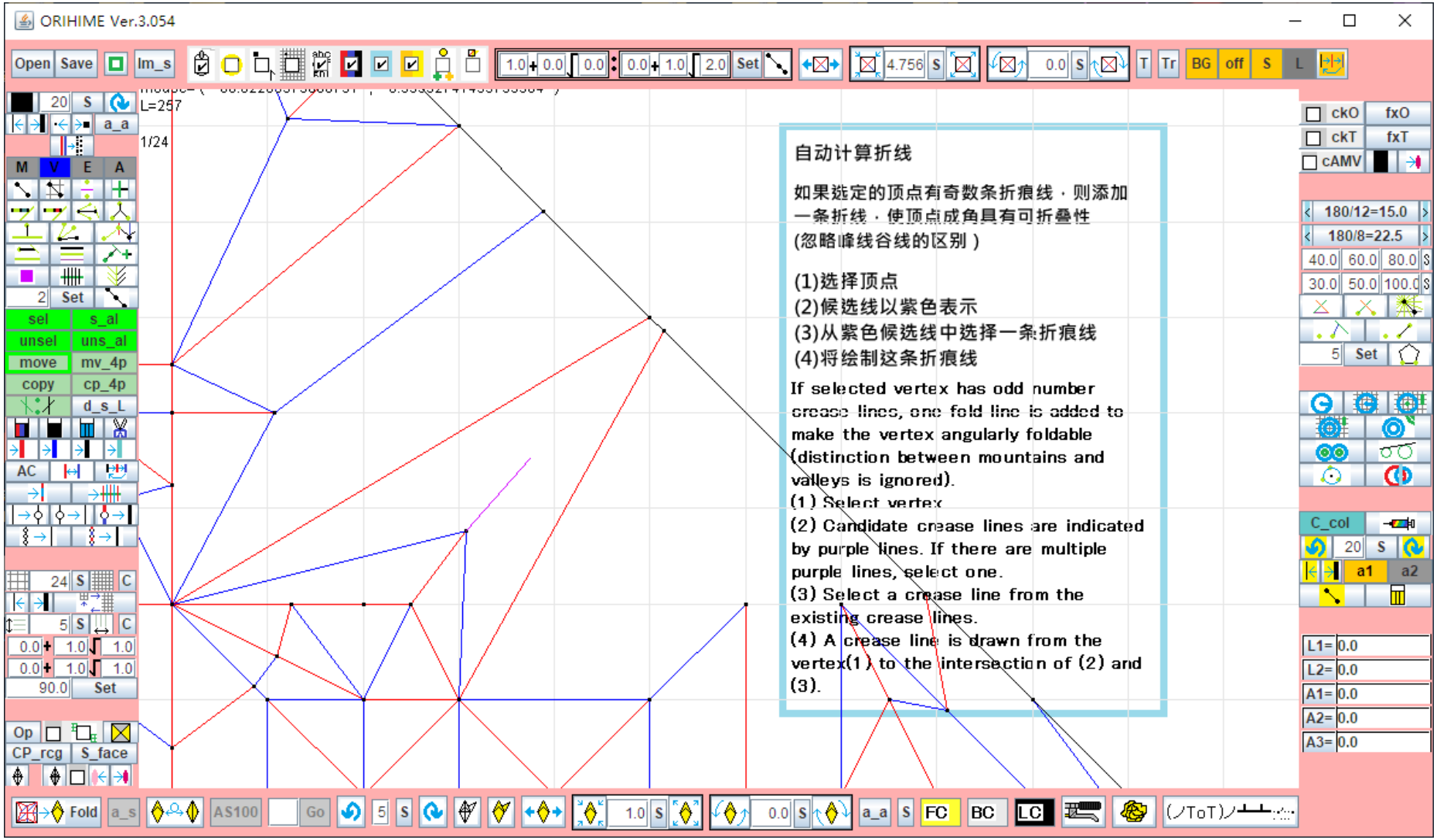

ORIHIME Ver.3.054
Open
Save
Im_s
Set
L=252
1/24
M
V
E
A
sel
s_al
unsel
uns_al
move
mv_4p
copy
cp_4p
d_s_L
AC
Op
CP_rcg
S_face
Fold
a_s
AS100
Go
FC
BC
LC
ckO
fxO
ckT
fxT
cAMV
C_col
a1
a2
L1= 0.0
L2= 0.0
A1= 0.0
A2= 0.0
A3= 0.0
延申
自动计算折线
如果选定的顶点有奇数条折痕线，则添加一条折线，使顶点成角具有可折叠性
(忽略峰线谷线的区别)
(1)选择顶点
(2)候选线以紫色表示
(3)从紫色候选线中选择一条折痕线
(4)将绘制这条折痕线
If selected vertex has odd number crease lines, one fold line is added to make the vertex angularly foldable (distinction between mountains and valleys is ignored).
(1) Select vertex.
(2) Candidate crease lines are indicated by purple lines. If there are multiple purple lines, select one.
(3) Select a crease line from the existing crease lines.
(4) A crease line is drawn from the vertex(1) to the intersection of (2) and (3).

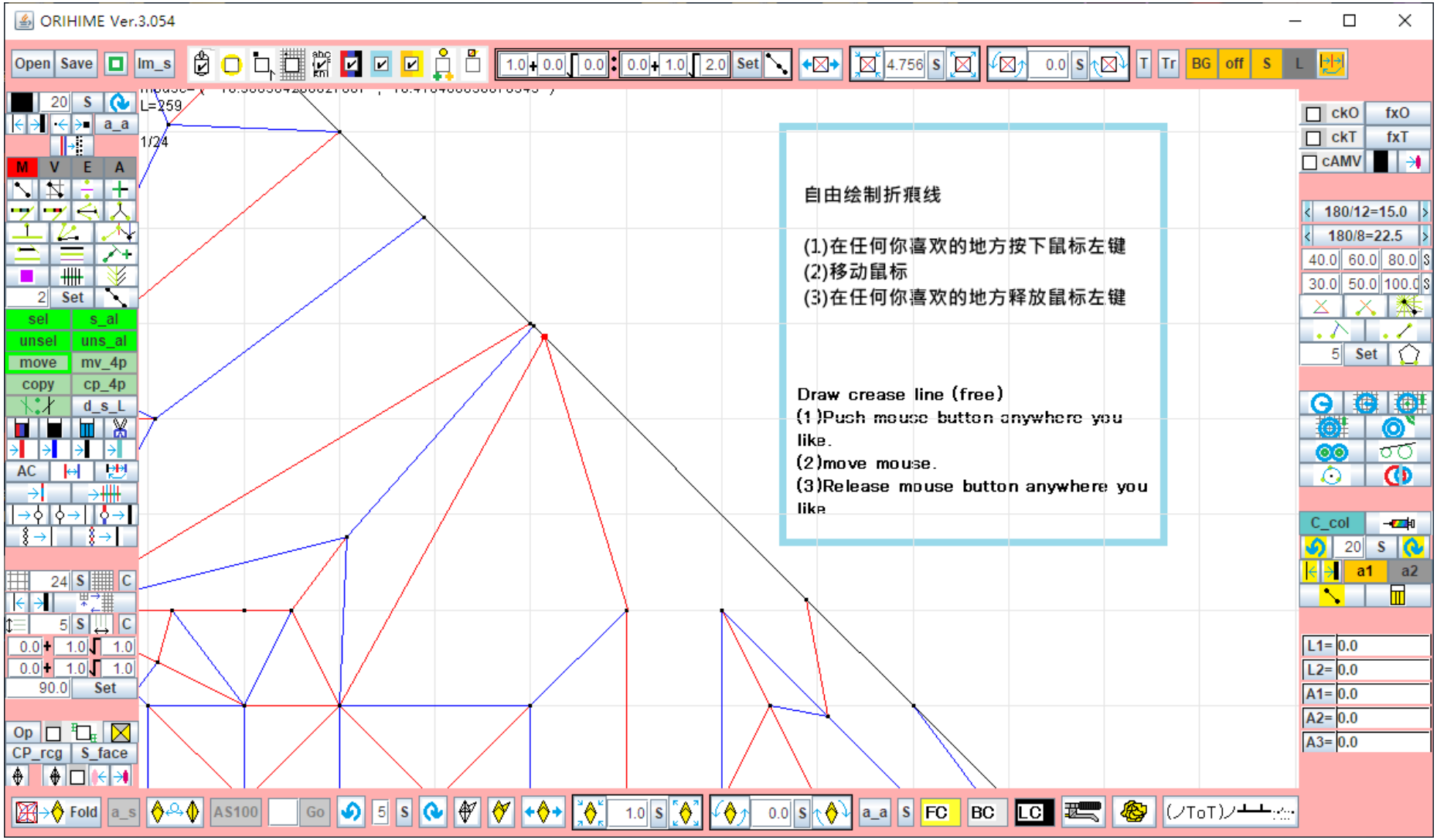

ORIHIME Ver.3.054
自动计算折线
如果选定的顶点有奇数条折痕线，则添加一条折线，使顶点成角具有可折叠性
(忽略峰线谷线的区别)
(1)选择顶点
(2)候选线以紫色表示
(3)从紫色候选线中选择一条折痕线
(4)将绘制这条折痕线
If selected vertex has odd number crease lines, one fold line is added to make the vertex angularly foldable (distinction between mountains and valleys is ignored).
(1) Select vertex.
(2) Candidate crease lines are indicated by purple lines. If there are multiple purple lines, select one.
(3) Select a crease line from the existing crease lines.
(4) A crease line is drawn from the vertex(1) to the intersection of (2) and (3).
同上

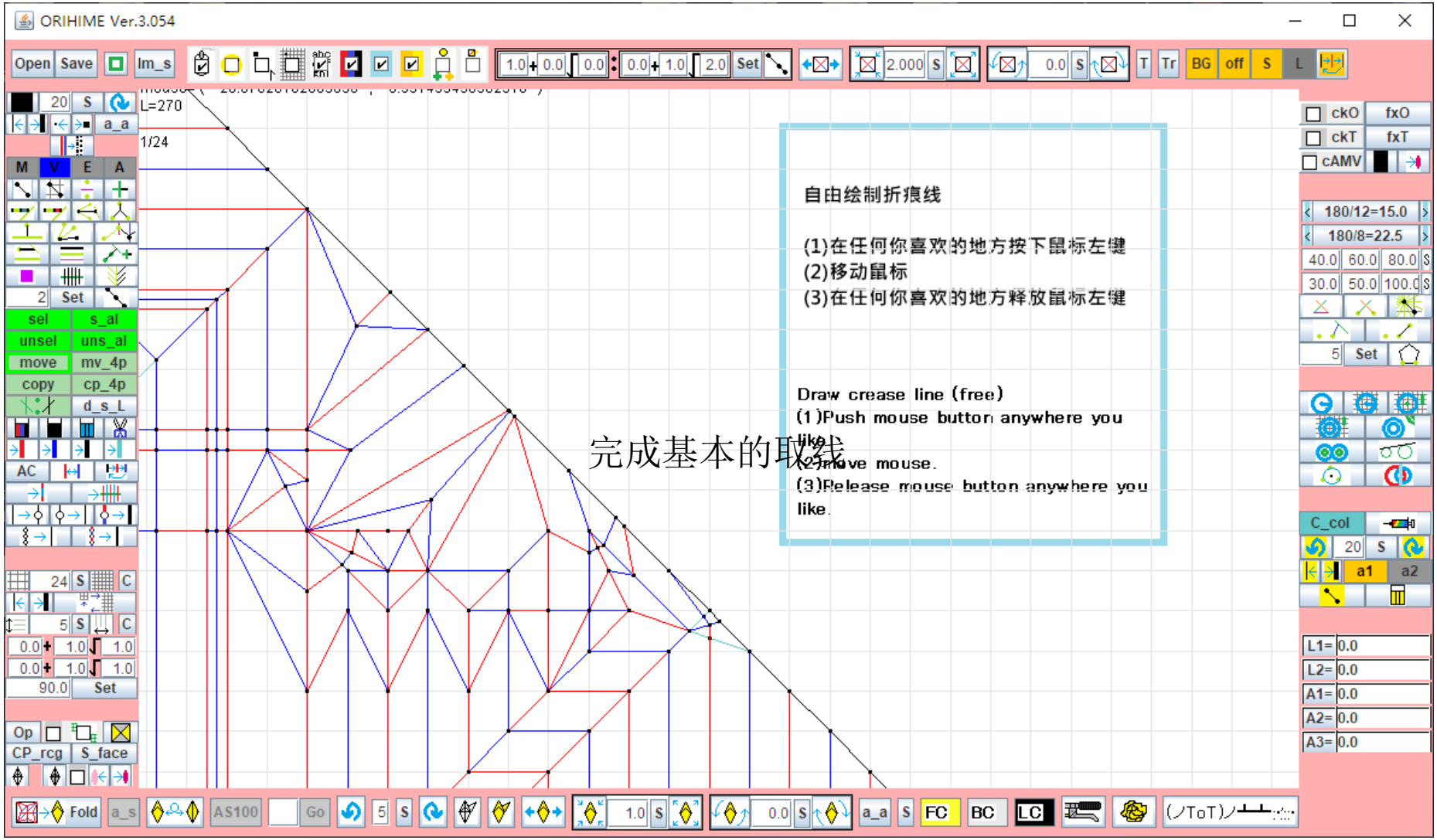

ORIHIME Ver.3.054
Open
Save
Im_s
Set
T
Tr
BG
off
L=254
1/24
自动计算折线
如果选定的顶点有奇数条折痕线，则添加一条折线，使顶点成角具有可折叠性
(忽略峰线谷线的区别)
(1)选择顶点
(2)候选线以紫色表示
(3)从紫色候选线中选择一条折痕线
(4)将绘制这条折痕线
If selected vertex has odd number crease lines, one fold line is added to make the vertex angularly foldable (distinction between mountains and valleys is ignored).
(1) Select vertex.
(2) Candidate crease lines are indicated by purple lines. If there are multiple purple lines, select one.
(3) Select a crease line from the existing crease lines.
(4) A crease line is drawn from the vertex(1) to the intersection of (2) and (3).
sel
unsel
move
copy
AC
Op
CP_rcg
S_face
Fold
Go
FC
BC
LC
C_col
L1=
L2=
A1=
A2=
A3=

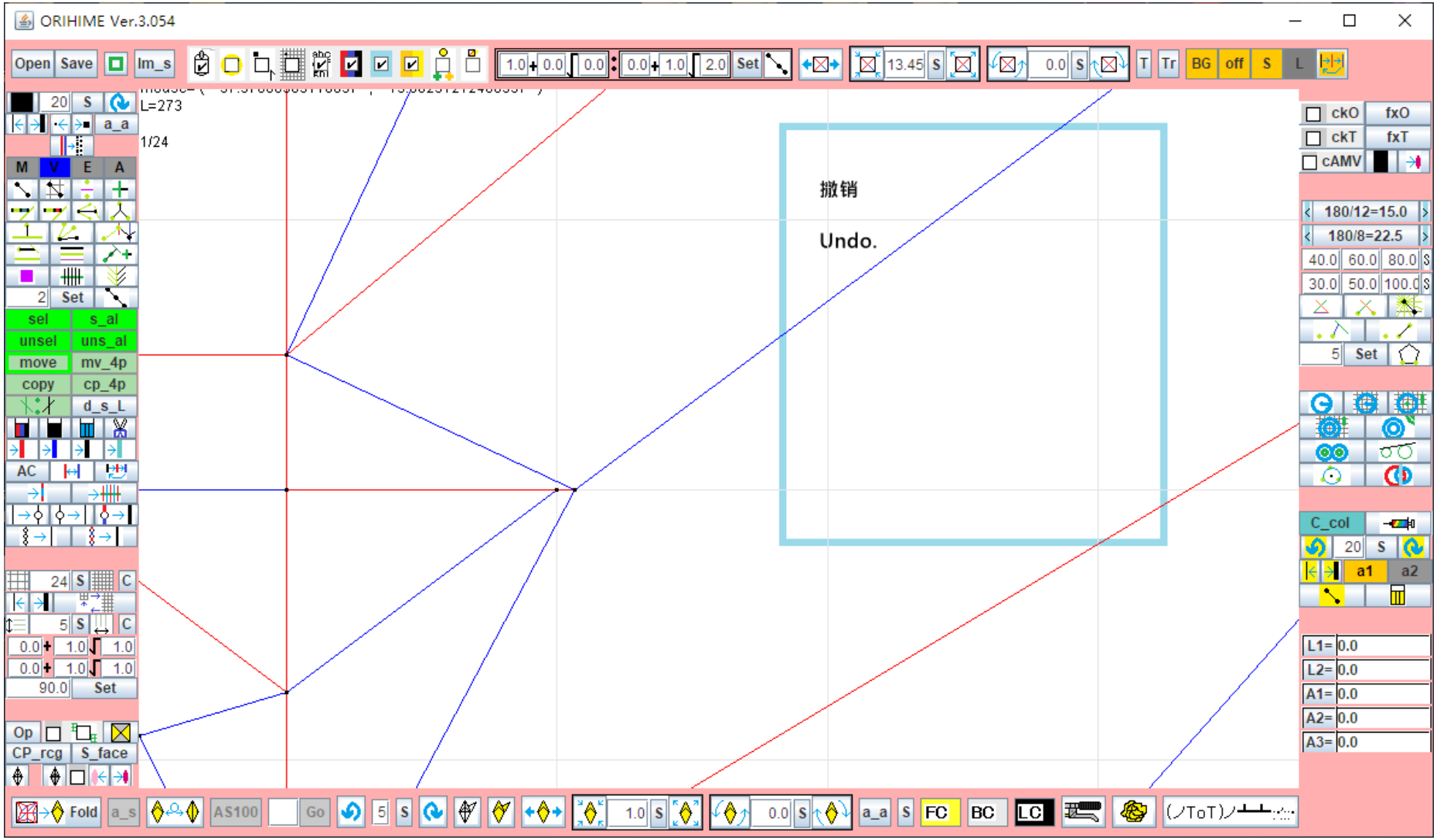

ORIHIME Ver.3.054
Open
Save
Im_s
Set
T
Tr
BG
off
S
L
撤销
Undo.
sel
s_al
unsel
uns_al
move
mv_4p
copy
cp_4p
d_s_L
AC
Op
CP_rcg
S_face
Fold
a_s
AS100
Go
FC
BC
LC
ckO
fxO
ckT
fxT
cAMV
180/12=15.0
180/8=22.5
C_col
a1
a2
L1=
L2=
A1=
A2=
A3=

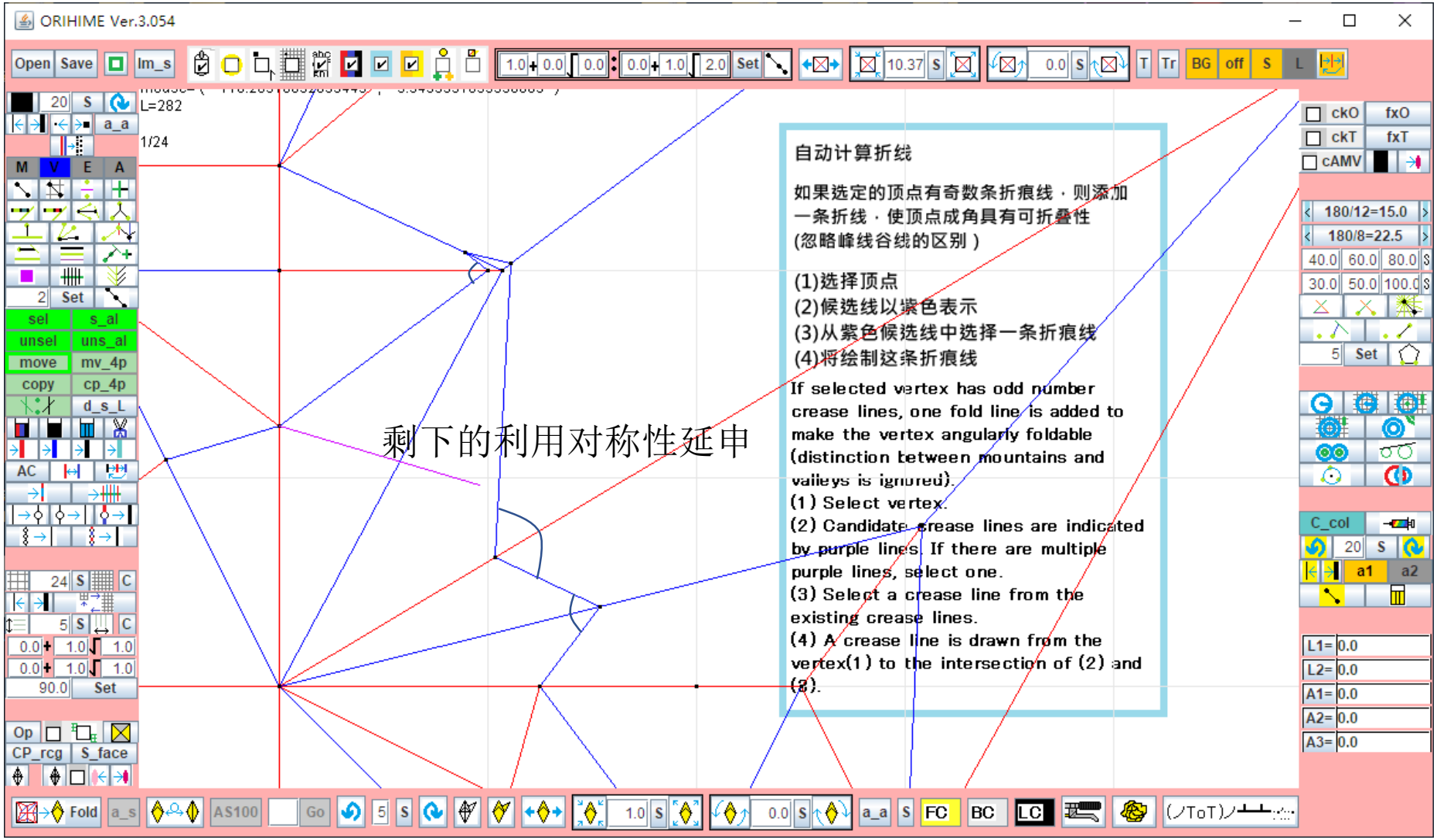

ORIHIME Ver.3.054
Open
Save
Im_s
Set
T
Tr
BG
off
L=256
1/24
自动计算折线
如果选定的顶点有奇数条折痕线，则添加一条折线，使顶点成角具有可折叠性
(忽略峰线谷线的区别)
(1)选择顶点
(2)候选线以紫色表示
(3)从紫色候选线中选择一条折痕线
(4)将绘制这条折痕线
If selected vertex has odd number crease lines, one fold line is added to make the vertex angularly foldable (distinction between mountains and valleys is ignored).
(1) Select vertex.
(2) Candidate crease lines are indicated by purple lines. If there are multiple purple lines, select one.
(3) Select a crease line from the existing crease lines.
(4) A crease line is drawn from the vertex(1) to the intersection of (2) and (3).
sel
unsel
move
copy
AC
Op
CP_rcg
S_face
Fold
AS100
Go
FC
BC
LC
C_col
L1= 0.0
L2= 0.0
A1= 0.0
A2= 0.0
A3= 0.0

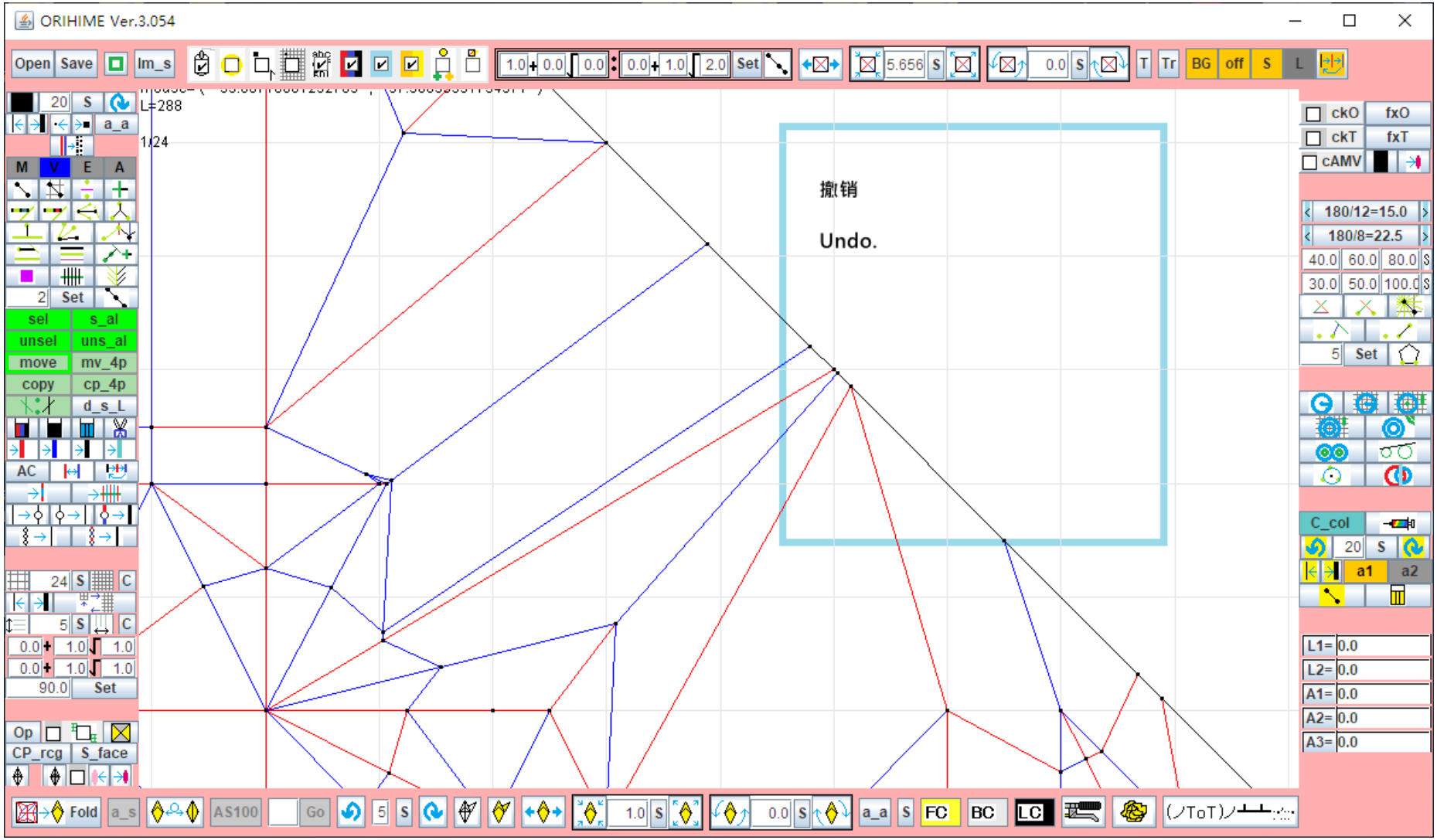

ORIHIME Ver.3.054
Open
Save
Im_s
Set
T
Tr
BG
off
L=257
1/24
自动计算折线
如果选定的顶点有奇数条折痕线，则添加一条折线，使顶点成角具有可折叠性
(忽略峰线谷线的区别)
(1)选择顶点
(2)候选线以紫色表示
(3)从紫色候选线中选择一条折痕线
(4)将绘制这条折痕线
If selected vertex has odd number crease lines, one fold line is added to make the vertex angularly foldable (distinction between mountains and valleys is ignored).
(1) Select vertex.
(2) Candidate crease lines are indicated by purple lines. If there are multiple purple lines, select one.
(3) Select a crease line from the existing crease lines.
(4) A crease line is drawn from the vertex(1) to the intersection of (2) and (3).
sel
s_al
unsel
uns_al
move
mv_4p
copy
cp_4p
d_s_L
AC
Op
CP_rcg
S_face
Fold
AS100
Go
FC
BC
LC
ckO
fxO
ckT
fxT
cAMV
180/12=15.0
180/8=22.5
C_col
a1
a2
L1= 0.0
L2= 0.0
A1= 0.0
A2= 0.0
A3= 0.0

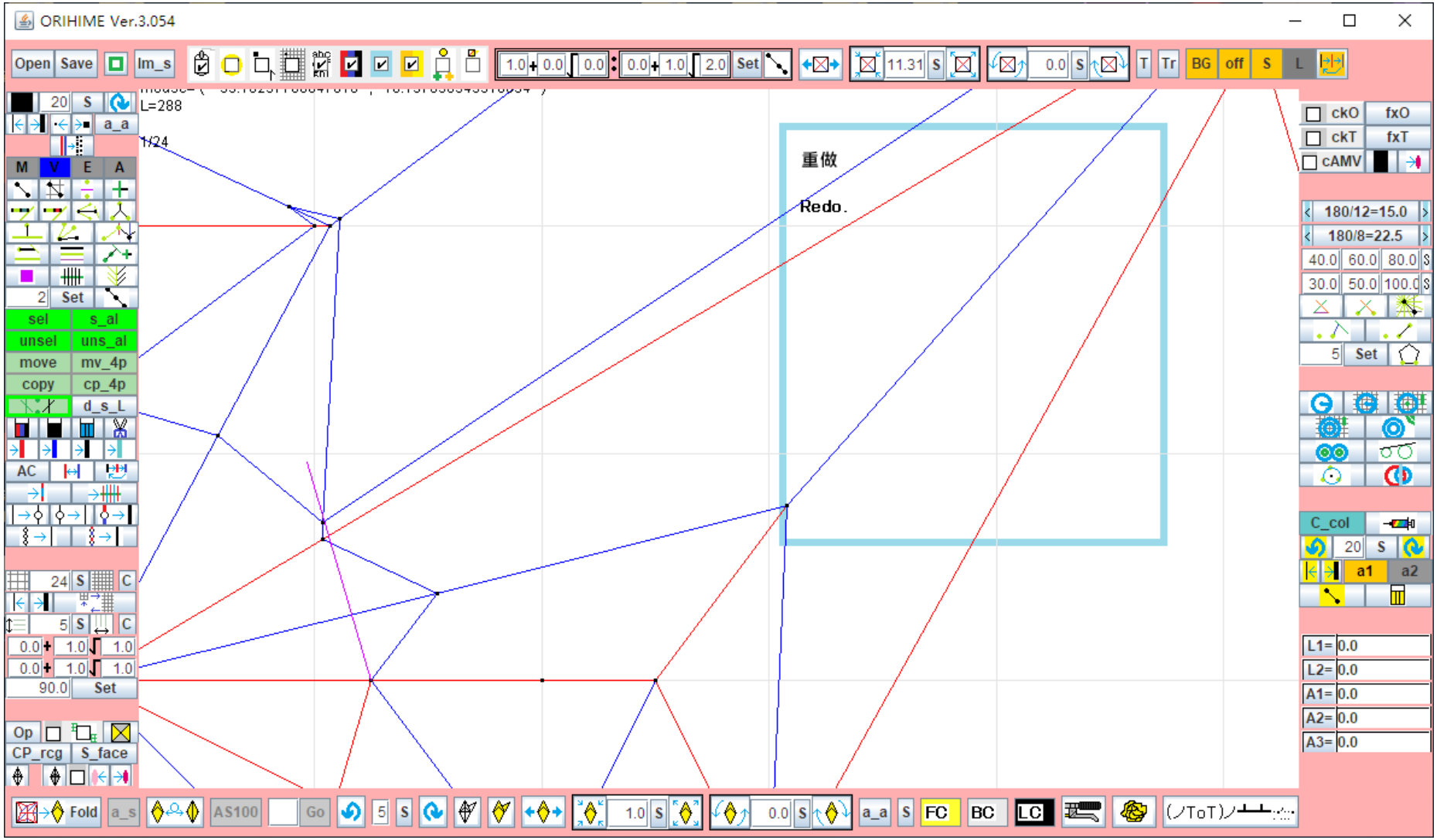

ORIHIME Ver.3.054
Open
Save
Im_s
Set
T
Tr
BG
off
L=259
1/24
自由绘制折痕线
(1)在任何你喜欢的地方按下鼠标左键
(2)移动鼠标
(3)在任何你喜欢的地方释放鼠标左键
Draw crease line (free)
(1)Push mouse button anywhere you like.
(2)move mouse.
(3)Release mouse button anywhere you like
sel
s_al
unsel
uns_al
move
mv_4p
copy
cp_4p
d_s_L
AC
Op
CP_rcg
S_face
Fold
Go
ckO
fxO
ckT
fxT
cAMV
180/12=15.0
180/8=22.5
Set
C_col
a1
a2
L1=
L2=
A1=
A2=
A3=
FC
BC
LC

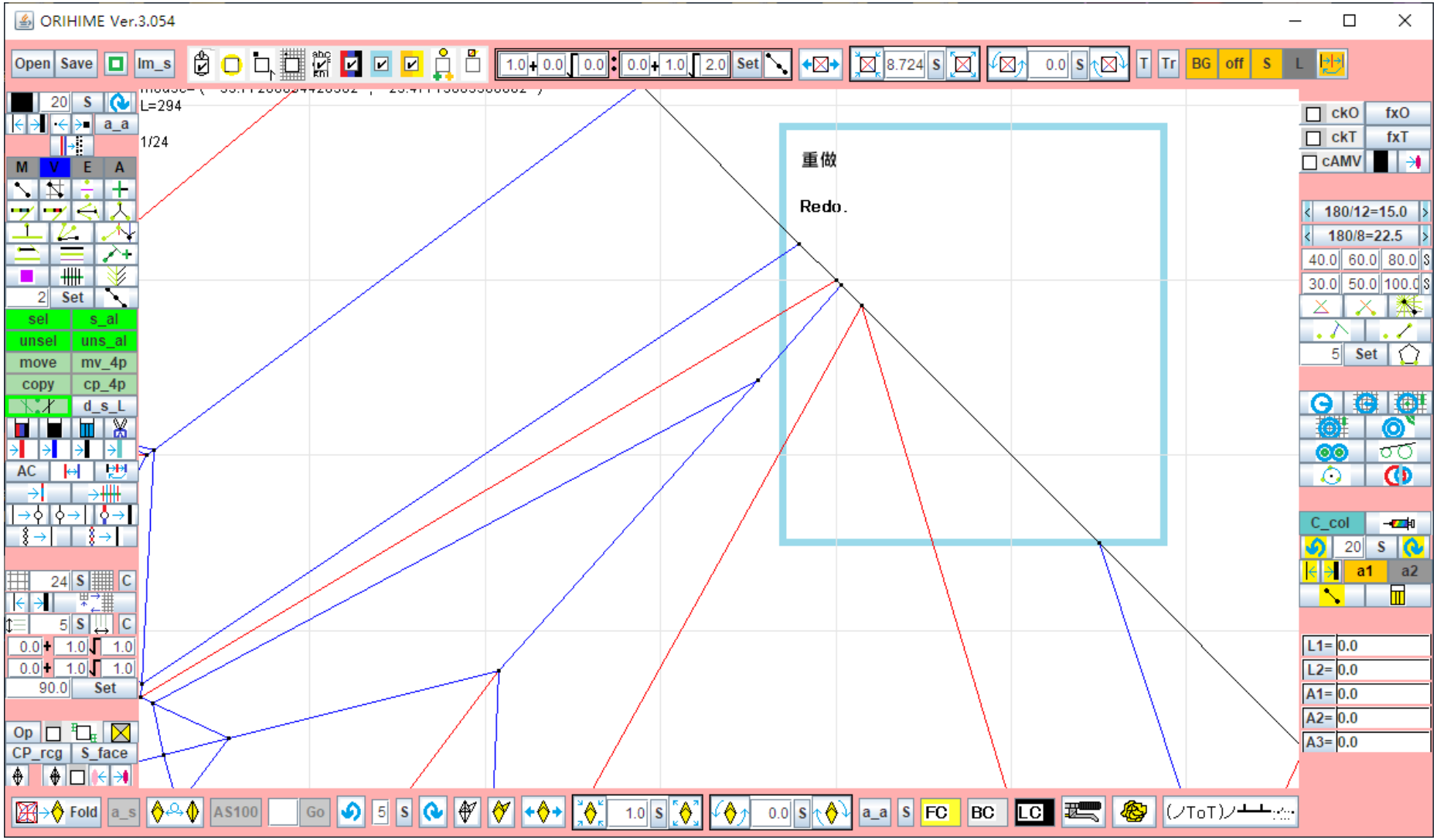

ORIHIME Ver.3.054
Open
Save
Im_s
L=270
1/24
自由绘制折痕线
(1)在任何你喜欢的地方按下鼠标左键
(2)移动鼠标
(3)在任何你喜欢的地方释放鼠标左键
Draw crease line (free)
(1)Push mouse button anywhere you like.
(2)Move mouse.
(3)Release mouse button anywhere you like.
完成基本的取线
sel
unsel
move
copy
Fold
Go
FC
BC
LC

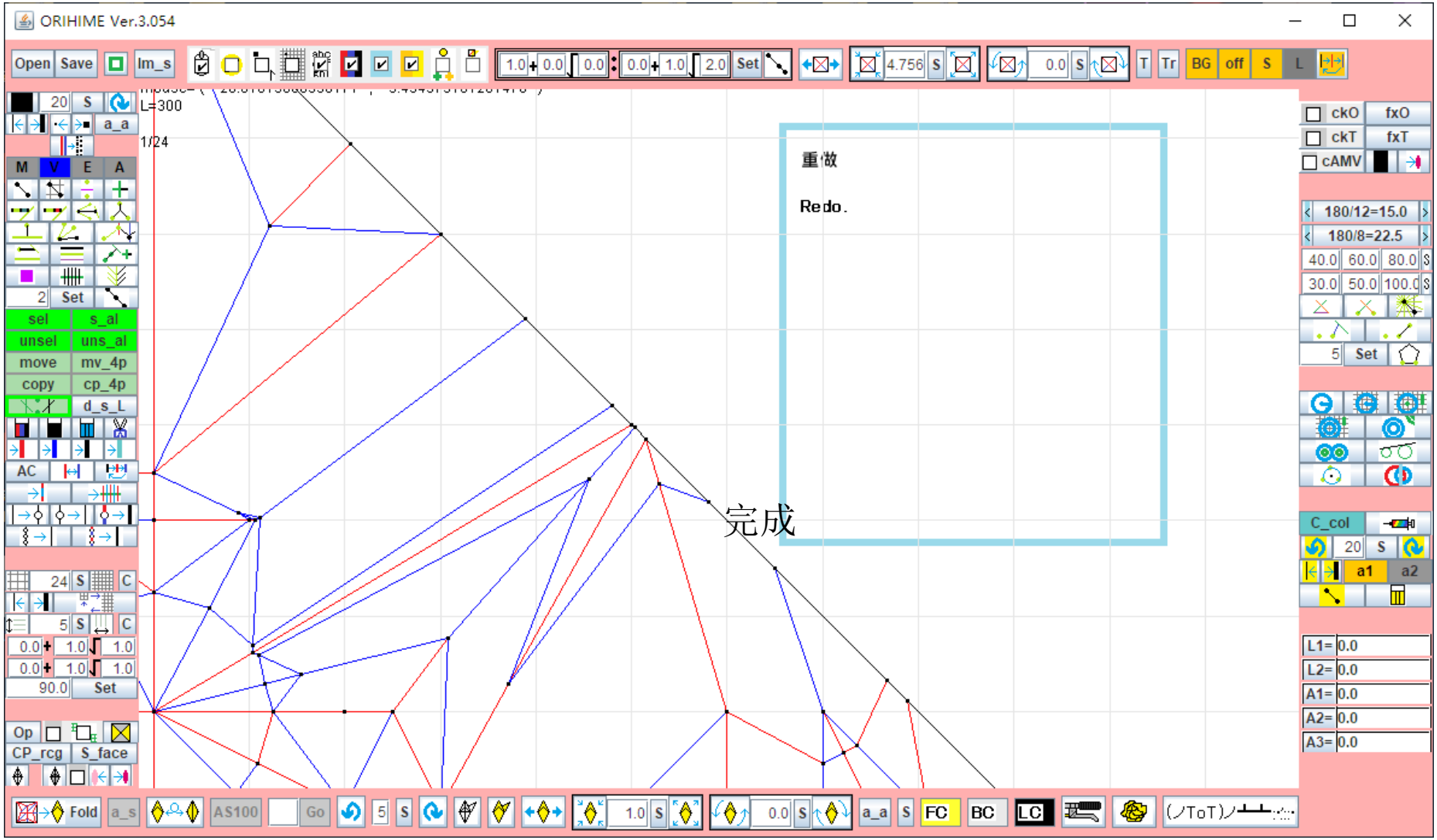

ORIHIME Ver.3.054
Open
Save
Im_s
Set
T
Tr
BG
off
L=273
1/24
撤销
Undo.
M
V
E
A
sel
s_al
unsel
uns_al
move
mv_4p
copy
cp_4p
d_s_L
AC
Op
CP_rcg
S_face
Fold
a_s
AS100
Go
FC
BC
LC
ckO
fxO
ckT
fxT
cAMV
180/12=15.0
180/8=22.5
C_col
a1
a2
L1=
L2=
A1=
A2=
A3=

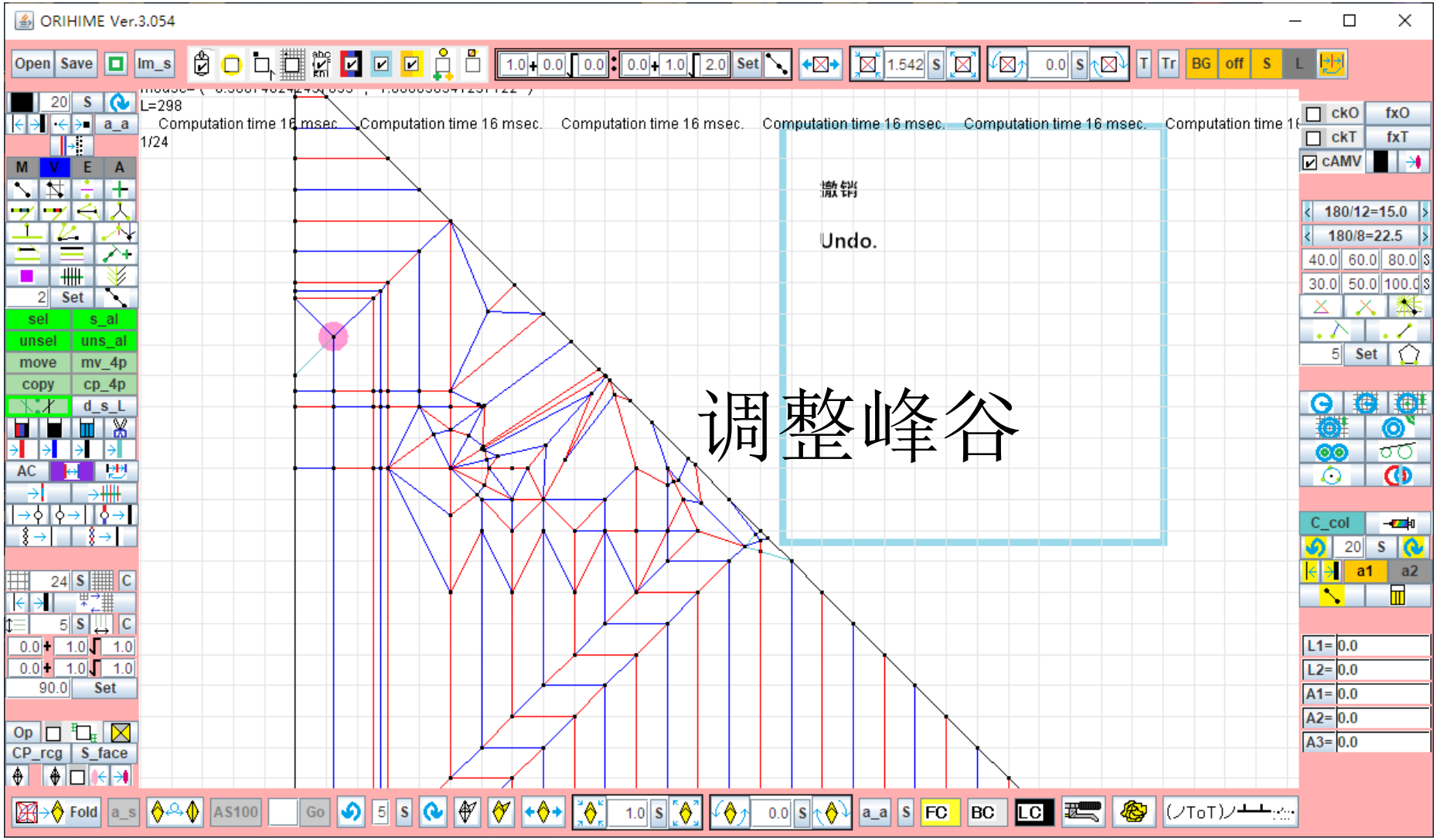

ORIHIME Ver.3.054
Open
Save
Im_s
Set
T
Tr
BG
off
S
L
L=282
1/24
M
V
E
A
sel
s_al
unsel
uns_al
move
mv_4p
copy
cp_4p
d_s_L
AC
Op
CP_rcg
S_face
Fold
a_s
AS100
Go
FC
BC
LC
ckO
fxO
ckT
fxT
cAMV
180/12=15.0
180/8=22.5
C_col
a1
a2
L1= 0.0
L2= 0.0
A1= 0.0
A2= 0.0
A3= 0.0
自动计算折线
如果选定的顶点有奇数条折痕线，则添加一条折线，使顶点成角具有可折叠性
(忽略峰线谷线的区别)
(1)选择顶点
(2)候选线以紫色表示
(3)从紫色候选线中选择一条折痕线
(4)将绘制这条折痕线
If selected vertex has odd number crease lines, one fold line is added to make the vertex angularly foldable (distinction between mountains and valleys is ignored).
(1) Select vertex.
(2) Candidate crease lines are indicated by purple lines. If there are multiple purple lines, select one.
(3) Select a crease line from the existing crease lines.
(4) A crease line is drawn from the vertex(1) to the intersection of (2) and (3).
剩下的利用对称性延申

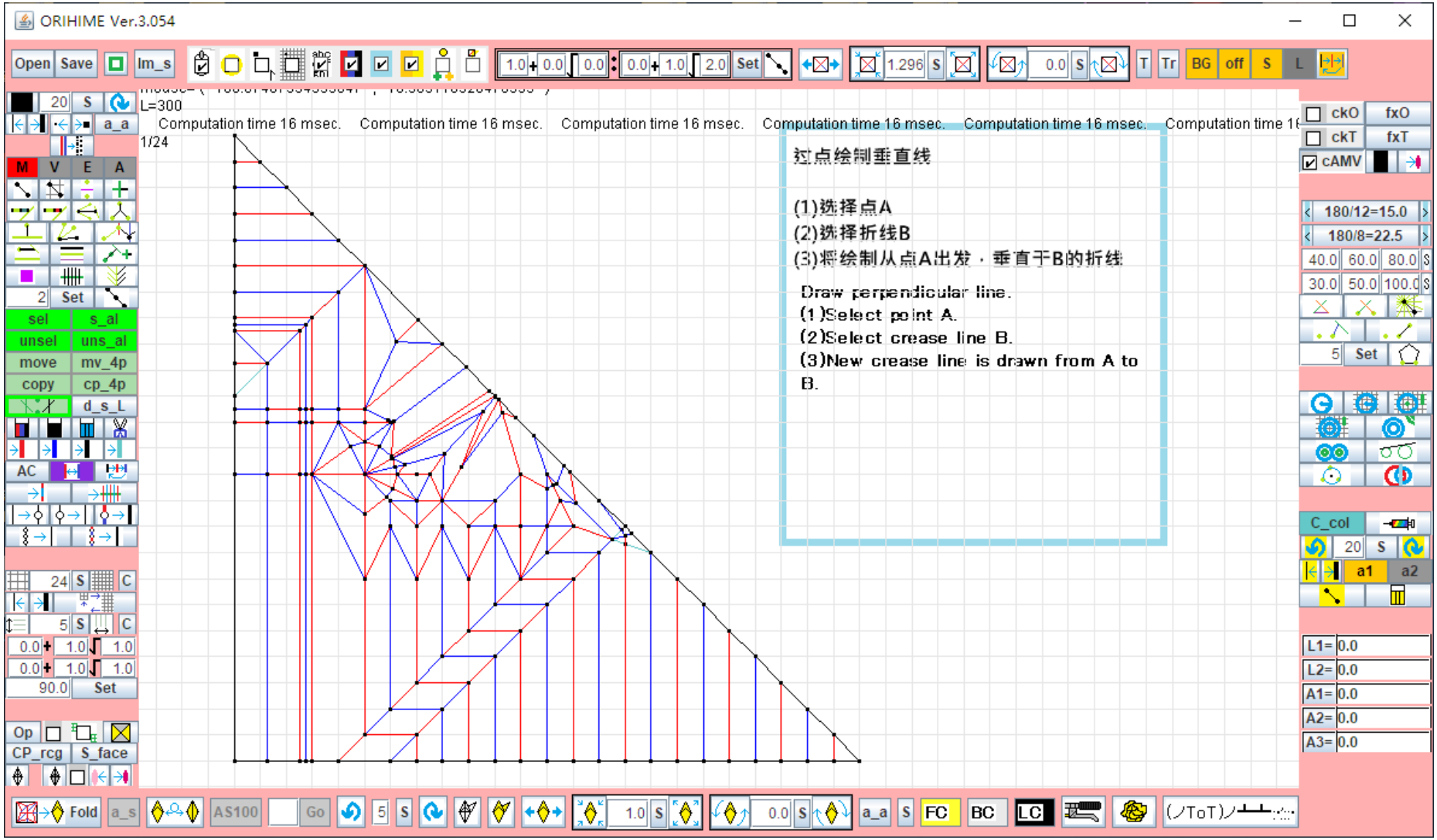

ORIHIME Ver.3.054
Open
Save
Im_s
Set
T
Tr
BG
off
S
L
撤销
Undo.
ckO
fxO
ckT
fxT
cAMV
180/12=15.0
180/8=22.5
Set
sel
s_al
unsel
uns_al
move
mv_4p
copy
cp_4p
d_s_L
AC
Op
CP_rcg
S_face
C_col
a1
a2
L1= 0.0
L2= 0.0
A1= 0.0
A2= 0.0
A3= 0.0
Fold
a_s
AS100
Go
FC
BC
LC

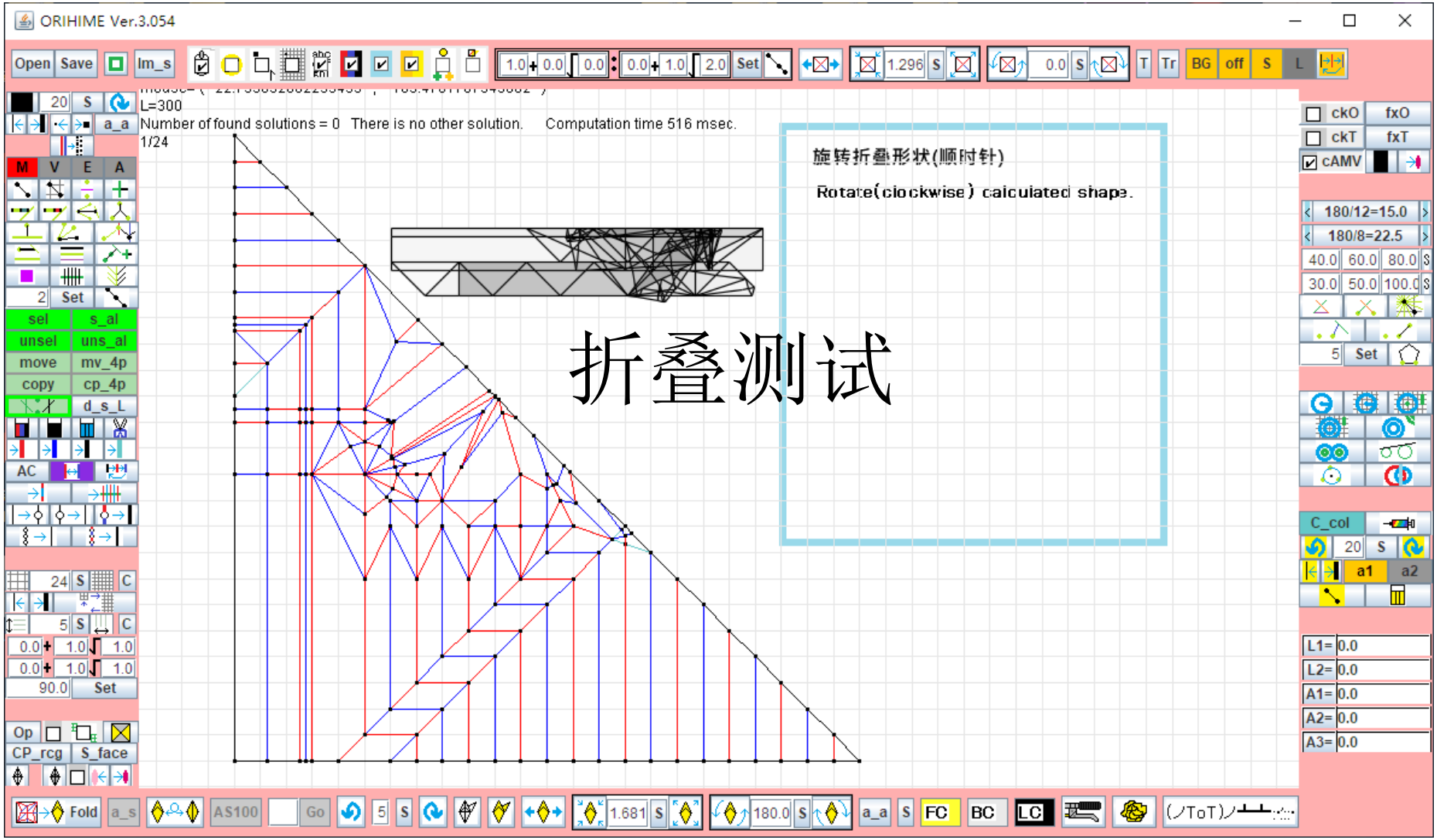

ORIHIME Ver.3.054
Open
Save
Im_s
Set
11.31
T
Tr
BG
off
L=288
1/24
重做
Redo.
ckO
fxO
ckT
fxT
cAMV
180/12=15.0
180/8=22.5
M
V
E
A
sel
s_al
unsel
uns_al
move
mv_4p
copy
cp_4p
d_s_L
AC
Op
CP_rcg
S_face
C_col
a1
a2
L1= 0.0
L2= 0.0
A1= 0.0
A2= 0.0
A3= 0.0
Fold
AS100
Go
FC
BC
LC


ORIHIME Ver.3.054
Open
Save
Im_s
Set
T
Tr
BG
off
L=294
1/24
重做
Redo.
M
V
E
A
sel
s_al
unsel
uns_al
move
mv_4p
copy
cp_4p
d_s_L
AC
Op
CP_rcg
S_face
ckO
fxO
ckT
fxT
cAMV
180/12=15.0
180/8=22.5
C_col
a1
a2
L1=
L2=
A1=
A2=
A3=
Fold
a_s
AS100
Go
FC
BC
LC


ORIHIME Ver.3.054
Open
Save
Im_s
L=300
1/24
重做
Redo.
完成
Set
sel
s_al
unsel
uns_al
move
mv_4p
copy
cp_4p
d_s_L
AC
Op
CP_rcg
S_face
Fold
AS100
Go
FC
BC
LC
ckO
fxO
ckT
fxT
cAMV
180/12=15.0
180/8=22.5
C_col
a1
a2
L1= 0.0
L2= 0.0
A1= 0.0
A2= 0.0
A3= 0.0


ORIHIME Ver.3.054
Open
Save
Im_s
Set
T
Tr
BG
off
L=298
1/24
Computation time 16 msec.
Undo.
调整峰谷
sel
s_al
unsel
uns_al
move
mv_4p
copy
cp_4p
d_s_L
AC
Op
CP_rcg
S_face
Fold
AS100
Go
FC
BC
LC
ckO
fxO
ckT
fxT
cAMV
180/12=15.0
180/8=22.5
C_col
a1
a2
L1=
L2=
A1=
A2=
A3=


ORIHIME Ver.3.054
L=300
1/24
Computation time 16 msec.
过点绘制垂直线
(1)选择点A
(2)选择折线B
(3)将绘制从点A出发，垂直于B的折线
Draw perpendicular line.
(1)Select point A.
(2)Select crease line B.
(3)New crease line is drawn from A to B.


ORIHIME Ver.3.054
Open
Save
Im_s
Set
L=300
Number of found solutions = 0 There is no other solution. Computation time 516 msec.
1/24
旋转折叠形状(顺时针)
Rotate(clockwise) calculated shape.
折叠测试
sel
s_al
unsel
uns_al
move
mv_4p
copy
cp_4p
d_s_L
AC
Op
CP_rcg
S_face
Fold
a_s
AS100
Go
ckO
fxO
ckT
fxT
cAMV
180/12=15.0
180/8=22.5
C_col
a1
a2
L1= 0.0
L2= 0.0
A1= 0.0
A2= 0.0
A3= 0.0
FC
BC
LC